Same-Day CEREC Crowns: How They Work | Core Dental

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Details:

CEREC stands for Chairside Economical Restoration of Esthetic Ceramics. It is a CAD/CAM system developed by Dentsply Sirona that lets a dentist design and mill a ceramic restoration, such as a crown, onlay, inlay or veneer, at the practice while you are there. Because the restoration is made chairside, many single-tooth crowns can be completed in one visit, without a temporary crown or a second appointment. At Core Dental we offer same-day CEREC crowns at selected clinics, and your dentist will confirm whether your tooth is suitable.

What does CEREC stand for, and what is it?

CEREC stands for Chairside Economical Restoration of Esthetic Ceramics. It is a CAD/CAM (computer-aided design and computer-aided manufacturing) system developed by Dentsply Sirona. It allows a dentist to design and mill ceramic restorations, including crowns, onlays, inlays and veneers, directly in the dental practice while the patient waits.

The chairside approach means the whole process of making and placing the restoration can happen during a single visit. For suitable teeth, that can remove the need for multiple appointments and the temporary restorations that are part of a traditional crown procedure.

How does the traditional crown process compare?

Picture the traditional crown process. You visit your dentist, the tooth is prepared, an impression is taken using a tray of impression material, and a temporary crown is fitted. You go home with instructions to avoid sticky food and chewing on that side, and you return in a week or two. When you come back, the permanent crown is tried in, adjusted and cemented. That usually means two appointments, local anaesthetic on two occasions and some time managing a temporary crown, which can occasionally loosen or feel uncomfortable.

With a same-day crown the preparation is similar, but the digital steps mean the permanent crown can be made while you are at the practice. Same-day treatment is not suitable for every tooth or every situation. Some cases are better made by a ceramist, and your dentist will talk you through which approach fits.

What are the main parts of the CEREC system?

CEREC systems have three connected components:

a digital scanner , which captures a three-dimensional model of your prepared tooth and the teeth around it

design software , which proposes a restoration shape that your dentist then refines

a milling unit , which carves the restoration from a ceramic block

Your dentist uses these together with their clinical judgement about your bite, your tooth and the look you want.

How does the digital scanner work?

Instead of an impression tray filled with silicone or alginate, the dentist uses a small handheld scanner to capture a detailed three-dimensional digital model of the prepared tooth and the surrounding teeth. The scanner takes a large number of images to build a map of your teeth, and you can usually watch the model appear on screen. Many patients find a digital scan more comfortable than a traditional impression, especially if they tend to gag. Digital scanning can also reduce some of the steps in which a physical impression might be distorted, although accuracy still depends on the dentist and the case.

What are the steps in a same-day crown appointment?

The steps below are a general guide, and timing varies from person to person.

Assessment and preparation. Your dentist examines the tooth and decides whether a crown is appropriate rather than an onlay, inlay or filling. The tooth is prepared under local anaesthetic. Decayed or weakened tooth structure is removed, and the remaining tooth is shaped to receive the crown. This step is the same whether you are having a CEREC crown or a traditional crown, and it needs the same skill and care either way.

Digital scanning. Your dentist scans the area, which generally takes a few minutes. The scan also captures your bite, meaning how your upper and lower teeth meet, which matters for a crown that functions correctly. If an area was not captured clearly, it can be rescanned.

Design. The dentist designs the crown on screen. The software proposes a shape based on the surrounding teeth and the opposing bite, and the dentist refines the contacts, contours, bite and the way the crown meets the gum. Many dentists walk patients through the design, and you can talk about how bulky or slim you would like the tooth to feel. The design phase typically takes about 10 to 15 minutes.

Milling. The design is sent to the milling unit, which carves the crown from a ceramic block chosen to match your natural tooth colour. Ceramic blocks come in a range of shades and translucencies. Milling usually takes several minutes.

Characterisation and firing. The milled crown may be customised with surface stains and a glaze to match the colour, texture and sheen of your natural teeth. Depending on the material, it may be fired in a small furnace for about 10 to 15 minutes, which helps the ceramic reach its final strength and appearance.

Bonding. The finished crown is tried in, and your dentist checks fit, bite, contacts and appearance. It is then bonded to the prepared tooth with adhesive resin cement.

Total time in the chair is typically around 60 to 90 minutes, though it depends on the tooth and the case.

Are CEREC crowns as durable as laboratory-made crowns?

This is a common question, and it deserves a balanced answer. The ceramics used with CEREC include lithium disilicate, zirconia-reinforced lithium silicate and hybrid ceramics, which are also used in dental laboratories. Published research on these materials is ongoing, and results depend on the material, the tooth, how well the crown is bonded and how you care for it. We recommend asking your dentist what is known about the material they propose for your tooth.

Where chairside milling and a laboratory differ is in the range of work each suits. For a single crown on a premolar or molar, chairside milling is a practical option with a short timeframe. For more complex cosmetic work, such as matching several veneers across the front teeth, managing a difficult shade, or making a long bridge, a ceramist who builds up porcelain by hand may be able to offer more

customisation.

Our team includes ceramists and dental technicians, so when a case suits hand-crafted laboratory work, your dentist can discuss the shade and characterisation with a ceramist. When a case suits a same-day approach, the crown can be made at the practice. You can read more about working with ceramists and technicians .

What are the practical benefits of a same-day crown?

For suitable teeth, the benefits can include:

One appointment instead of two. You may not need to take extra time off work or arrange childcare twice.

No temporary crown. Temporary crowns can fracture, come loose or feel uncomfortable, so avoiding one removes a source of inconvenience.

No impression trays. Digital scanning is often more comfortable, particularly if you have a strong gag reflex.

Fewer handling steps. A digital workflow removes some steps, such as shipping a model to a laboratory, where small errors can creep in.

These advantages do not apply to every case, and the right option depends on your tooth and your dentist's assessment.

Where can you have a same-day CEREC crown at Core Dental?

Same-day CEREC crowns are offered at our Epping , South Melbourne and Caroline Springs clinics. Availability can change, so please confirm with your preferred clinic when you book. If you are at another clinic and a same-day crown is suitable, your dentist can discuss your options.

What should you ask before having a crown?

A useful first step is to explain your concern, symptoms and treatment goals when you book. Bring relevant medical information and a current medicines list. Your dentist can assess your teeth, gums and bite, request imaging when it is clinically appropriate, and explain which options may suit you.

You may like to ask:

whether a crown is the right treatment, or whether an onlay, inlay or filling would suit you

whether a same-day crown is suitable for your tooth

what material is recommended and why

what the cost is, what is included, and what your health fund covers

how to care for the crown afterwards

A written treatment plan can help you compare stages, appointments and payment arrangements before you proceed. At Core Dental we quote before treatment starts. Any fees or rebates you are given are as published at the time and may change, so please confirm the current written terms and what a quote includes before booking or paying.

How long has CEREC been in clinical use?

Longer than most patients assume. The technology has been in development since the 1980s and in clinical use for more than two decades.

That history matters when weighing it up, because chairside milling is not a recent experiment. The current generation, CEREC Primescan with Primemill, differs from earlier systems principally in scanning accuracy, milling speed and the range of ceramic materials available, which together widen the set of cases that can reasonably be completed in one visit.

Which ceramic materials are used in CEREC blocks?

Three families of material are available in CEREC block form, and they are the same materials used in dental laboratories:

lithium disilicate , commonly known by the trade name e.max

zirconia-reinforced lithium silicate , such as Celtra Duo

hybrid ceramics , such as Vita Enamic

Each has different strength and optical characteristics, and the choice depends on which tooth is being restored, how much of it remains and how it meets the opposing teeth. Published research on these materials is ongoing, so ask your dentist what is known about the specific material proposed for your tooth rather than relying on a general figure.

How long do the milling and firing stages take?

Modern milling units can produce a crown in as little as four to five minutes from the finished design.

For most ceramics there is then a firing stage in the practice furnace. That step crystallises the ceramic, bringing it to its final strength and optical properties, and it is the reason a same-day crown is not simply milled and cemented straight away.

A same-day crown appointment typically runs 60 to 90 minutes from start to finish, which covers preparation of the tooth, scanning, design, milling, firing, fitting and adjustment of the bite.

What does the dentist decide that the software does not?

Rather more than the technology suggests, and this is the part worth understanding.

The design software proposes a starting shape based on the scan. The dentist's understanding of function, aesthetics and your specific bite determines the final design, including where the contacts sit against the neighbouring teeth and how the crown meets the opposing tooth when you chew and when you move your jaw sideways.

Before any of that, the tooth has to be prepared correctly. That is the clinical foundation of a good result, and it requires the same skill and attention regardless of whether the crown is milled in the practice or made in a laboratory.

When is laboratory work the better choice?

Three kinds of case generally suit a laboratory and a ceramist rather than chairside milling.

Existing restorations across the front teeth that have deteriorated, become discoloured or developed recurrent decay at the margins, where the new work has to match what remains.

Extensive cases involving many teeth , which benefit from comprehensive laboratory planning with mounted study models and diagnostic wax-ups before anything is made.

Work in a challenging shade environment , where the hand-layering capability of a skilled ceramist may be preferred to a milled block of uniform colour.

Because our team includes ceramists and dental technicians alongside the chairside systems, the choice can be made case by case rather than by whichever method the practice happens to own.

What actually goes wrong with a temporary crown?

The traditional route to a crown is two appointments, two rounds of anaesthesia, two disruptions to your schedule and a fortnight of managing a fragile temporary.

During those two weeks the temporary crown commonly comes loose at least once, usually while eating something you were specifically told to avoid. A temporary is cemented with a deliberately weak cement so it can be removed later, which is exactly why it does not stay put under normal chewing.

With a same-day crown you leave with the permanent restoration, so once the anaesthetic has worn off you can eat normally without protecting a temporary. Removing the temporary stage removes a whole category of inconvenience and of potential complication, including the risk of the prepared tooth becoming sensitive while uncovered.

Which sources of error does a digital workflow remove?

Four, and they are cumulative in the traditional sequence.

A digital workflow eliminates impression distortion, stone model expansion, shipping to the laboratory, and several analogue fabrication steps. Each of those introduces a small discrepancy of its own, and in the traditional route they stack up before the crown is ever tried in.

The scan itself is also checkable while you are still in the chair. If any area was not captured clearly, a quick re-scan fills the gap, rather than the problem surfacing two weeks later when the finished crown does not seat properly.

Frequently asked questions

Are CEREC crowns covered by health insurance?

From a health fund perspective, a CEREC crown is generally treated as a dental crown. Your cover depends on your extras policy and annual limits, not on how the crown was made. We offer on-the-spot health fund claiming through HICAPS, and you should check your own cover before treatment.

Do CEREC crowns last as long as traditional crowns?

Longevity depends on the material, the tooth, how the crown is bonded and your care. With good oral hygiene, regular dental reviews and sensible habits, such as not using your teeth to open bottles or chew ice, ceramic crowns can last many years. Your dentist can discuss what to expect.

Is a same-day crown procedure painful?

The tooth is prepared under local anaesthetic, so you should not feel pain during treatment. Some sensitivity can occur once the anaesthetic wears off, particularly if the tooth had a deep cavity or large filling. This often settles within a few days, but tell your dentist if it does not.

Can every Core Dental clinic make same-day crowns?

Same-day CEREC crowns are offered at our Epping, South Melbourne and Caroline Springs clinics. Please confirm availability with your preferred clinic when you book, because it can change.

Is every tooth suitable for a same-day crown?

No. Suitability depends on the tooth, the amount of tooth structure remaining, your bite and the type of restoration needed. Some cases suit laboratory-made restorations better, and your dentist will recommend an approach after examining you.

Why does the ceramic need to be fired?

Firing in the practice furnace crystallises the ceramic, bringing it to its final strength and optical properties. It is why a milled crown is not simply cemented straight from the milling unit, and it is part of why the appointment runs longer than the four to five minutes the milling itself takes.

Can I eat normally straight afterwards?

Once the anaesthetic has worn off, yes. Because you leave with the permanent crown rather than a temporary, there is nothing fragile to protect in the meantime.

What happens if the scan misses part of the tooth?

A quick re-scan fills the gap while you are still in the chair. That is one advantage of a digital workflow over an impression, where a flaw may only become apparent when the finished crown does not seat properly.

Which ceramics are used for CEREC crowns?

Lithium disilicate, zirconia-reinforced lithium silicate and hybrid ceramics, the same material families used in dental laboratories. Which one suits your tooth depends on its position, how much tooth remains and how it meets the opposing teeth, so ask your dentist what is proposed and why.

Related services and further reading

Dental crowns

What is a dental crown?

What should I know about dental crowns?

Dental crown options: metal, porcelain or both

CEREC same-day crowns and our technology

Digital dentistry at Core Dental

How our in-house ceramists help

Dental bridges

General dentistry

How can we help?

If you have a broken tooth, a large failing filling or have been told you need a crown, ask whether a same-day CEREC crown suits you. Our dentists can assess your tooth and explain your options. You

can also explore our cosmetic dentistry and general dentistry services. Call 13 13 16 or book online at any of our nine Core Dental practices.

Core Dental at a glance

Nine Core Dental clinics across Melbourne: Southbank, South Melbourne, Caroline Springs, Carrum Downs, Epping, Wyndham, Berwick, Bayside and Glenferrie.

Same-day CEREC crowns at selected clinics: Epping, South Melbourne and Caroline Springs.

Open six days a week: Monday to Friday 8.00am to 6.00pm and Saturday mornings.

We quote before treatment starts, offer interest-free payment plans and claim health funds on the spot through HICAPS.

Call 13 13 16 or book online.

Contact Core Dental

Phone	13 13 16
Booking	Online through coredental.com.au, or call 13 13 16
Hours	Monday to Friday 8.00am to 6.00pm, Saturday 8.00am to 1.30pm (Bayside Saturday 8.30am to 1.30pm), Sunday closed
Clinics	Southbank , South Melbourne , Caroline Springs , Carrum Downs , Epping , Wyndham , Berwick , Bayside , Glenferrie

Results, recovery times and potential risks vary for each individual. This information is general in nature and is intended for people over 18. Seek advice from a qualified, AHPRA-registered practitioner before proceeding.

What is CEREC?

CEREC is a CAD/CAM system from Dentsply Sirona that lets a dentist design and mill ceramic crowns, inlays, onlays and veneers at the practice. Core Dental offers it at selected clinics for suitable teeth.

Which Core Dental clinics offer same-day CEREC crowns?

Core Dental offers same-day CEREC crowns at our Epping, South Melbourne and Caroline Springs clinics. Please confirm availability with your preferred clinic when booking, because it can change.

How long does a same-day crown appointment take?

A same-day crown appointment typically takes around 60 to 90 minutes in the chair, though timing varies. The design stage often takes about 10 to 15 minutes. Core Dental dentists explain the expected time before starting.

Is a temporary crown needed with CEREC?

For a suitable tooth, a same-day crown is made while you are at the practice, so a temporary crown is often not needed. Your Core Dental dentist will tell you if your case needs a laboratory-made crown instead.

How are teeth scanned for a CEREC crown?

The dentist uses a small handheld digital scanner to capture a three-dimensional model of your prepared tooth, in place of an impression tray. Core Dental dentists often show you the model on screen as it builds.

Does Core Dental claim health fund rebates for crowns?

Core Dental clinics offer on-site health fund claiming through HICAPS, and your rebate depends on your extras policy and limits. We quote before treatment starts and offer interest-free payment plans, so please confirm current terms.

When might a laboratory-made crown be chosen instead of a same-day crown?

Complex cosmetic work, such as matching several front-tooth veneers or making a long bridge, may suit hand-crafted laboratory work. Core Dental ceramists and technicians can work with your dentist on those cases.

How do I book a same-day crown consultation at Core Dental?

Call Core Dental on 13 13 16 or book online through coredental.com.au. We have nine clinics across Melbourne and are open Monday to Friday 8.00am to 6.00pm and Saturday mornings, with Sunday closed.