BRIDGING THE VOID IN TEMPORARY RESTORATIVE MATERIALS

BISCO enters new territory with Pro-V C&B, helping dentists to quickly and simply create durable, natural-looking restorations
Time to Rethink **Temporary Crown & Bridge**

*Your current go-to material might not be the most clinically efficient*

Are you getting the very most out of your temporaries? There’s a good chance that clinicians aren’t asking themselves this question often, if they ask it at all.

Perhaps you’ve only used one material in recent history, and it seems to work well for you. Routines become married to the status quo—it’s the way you’ve always fabricated a temporary. However, it’s important to keep in mind that while your personal routine stays the same, chemistry is changing and manufacturers like BISCO are actively working to improve restorative materials. In fact, BISCO recently introduced Pro-V C&B, a temporary crown-and-bridge material that’s challenging the status quo by being more clinically efficient.

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**Pro-V C&B INDICATIONS FOR USE:**

- Fabrication of temporary prostheses, such as crowns, partial crowns, bridges, inlays, onlays, and veneers
- For use until a permanent restoration is fabricated
- Customization of prefabricated acrylic and metal crowns
- Fabrication of long-term temporary restorations

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Pro-V C&B quickly and simply creates very durable and natural-looking restorations. Developed using a multifunctional acrylic composite, Pro-V C&B creates a temporary restoration that is an excellent combination of strength, durability, flexibility, and esthetics to emulate a natural tooth. The self-curing material is available in 4 essential shades, polishes beautifully, and can be trimmed with minimal effort, making it the ideal temporary crown-and-bridge material.

Clinicians who try Pro-V C&B are noticing that it’s making the fabrication of temporaries simpler and faster, and it’s changing their perspective on what a temporary material can do. As one dentist stated, “I have used the same material for temporaries for many decades and thought I was pleased, until we used [Pro-V C&B].”
Many dentists delegate the task of creating a temporary restoration to their assistant, but before they do, they want to make sure that the material is up to their standards. That’s why Dental Product Shopper asked dentists across the country to independently evaluate BISCO’s Pro-V C&B. They rated it a “Best Product”, with a score of 4.6 out of 5 points.

Let’s consider Pro-V C&B’s 5 key attributes from 3 different perspectives: the manufacturer; an experienced dental assistant, Corey Norlander, who also works for BISCO as a product manager; and independent DPS evaluators.

**SIMPLICITY**

**Manufacturer:** Pro-V C&B can be applied into an impression with minimal effort, as it flows ideally into the impression with great control.

**Assistant:** “If there is a void in the material when flowing it into the impression, the restoration can easily break when you try to trim it. This would force me to make the temporary while the patient waits. I have not had these problems when using Pro-V C&B. From my experience, I would be surprised if anybody wouldn’t like this material better than what they’re currently using, just in terms of ease of use.” —Corey Norlander

**Dentist:** “By not having voids, we were not forced to fill in with flowable resin, which saved time.” —Dana Blalock, DDS

**STRONG**

**Manufacturer:** Temporary restorations fracture less frequently during removal and re-fitting.

**Assistant:** “The fact that Pro-V C&B is strong is a benefit at multiple steps. If you’re trimming a material that is strong, you’ll be able to adjust it. A strong material is more likely to last in the patient’s mouth for a couple of weeks. The last thing you want is for the patient to return to the office for a remake before the final restoration is placed.” —Corey Norlander

**Dentist:** “I am pleasantly surprised by the properties of BISCO’s Pro-V C&B with its superior hardness and the ease of adjustment.” —David Chan, DMD

**FAST**

**Manufacturer:** Once mixed, Pro-V C&B sets within 4 minutes.

**Assistant:** “Four minutes is the sweet spot for a setting time, and I would say Pro-V C&B is on the ‘fast’ end. Anything longer may feel too long for the patient. When this product is cured, it has a really awesome sheen. This speeds up the polishing process. Any time we are able to make procedures more efficient our office runs better. The practice, staff, and patients all benefit from this efficiency. Saving time in these steps means saving chair time for the patient.” —Corey Norlander

**ESTHETIC**

**Manufacturer:** The material has tooth-like translucency and opalescence with a natural fluorescence similar to enamel.

**Assistant:** “Pro-V C&B is available in 4 shades, and each one is capable of covering a range of shades. For instance, some patients have higher esthetic demands, and the bleach shade is able to accommodate that. This material also has a fantastic polish for anterior teeth. There’s a reason why BISCO made only a few shades—they’re all you need.” —Corey Norlander

**Dentist:** “It looks great and polished up nicely,” said Dr. David Mastrota, and Dr. David Ventker called the luster and translucency excellent. Dr. Jetter also noticed that Pro-V C&B provided better detail than a previous product, which “resulted in better esthetics for the patient.”

**VERSATILE**

**Manufacturer:** Pro-V C&B is suitable for long-term temporaries (>4 weeks) and for demanding anterior temporary restorations.

**Assistant:** “Pro-V C&B has not only the esthetics but also the strength to stand the test of time. This makes it a great option for a long-term temporary material. We can be confident that it will hold up for the patient while saving them money using an alternative to custom lab-made tempos.” —Corey Norlander

**Dentist:** Dr. Chan said, “This material is ideal as a long-term provisional and has a very thin oxygen-inhibited layer providing a natural shine with minimal polishing.” Reflecting on his experience with Pro-V C&B, Dr. Howard praised the material for just about everything, including “low shrinkage, good working time, smooth finish, excellent esthetics, and good setting time.”
The Evolution of Temporary Material

WITH BRUCE HOWARD, DMD

When I graduated from dental school in the mid-1980s, I dreaded making temporaries because it was time consuming and frustrating. I could prep a molar for a crown in less time than it took to make the temp. As an example of my frustrations, a good friend once commented on a molar crown I had made using methyl methacrylate by complimenting how well I made “Chiclet gum” teeth!

On one hand, methyl methacrylate was slow to set. If I checked it too soon it often distorted, and if I waited too long, it locked in undercuts of adjacent teeth and required drilling to free it. On the other hand, the surface was rough and required sequential polishing steps, and because it shrank, it often had to be hollowed out to fit. Sometimes, if there was minimal flashing after I removed the alginate matrix, I would leave the temporary crown on the tooth without temporary cement. I felt like an artist and an engineer in those days, but it took a lot of time and effort to achieve an esthetic result.

By the mid-1990s, bisacryl temporary material became available, offering an automix system and greatly improved material characteristics. There was no shrinkage, polishing was minimal due to the smooth surface, and the shades seemed to match natural teeth better. However, there were still barriers to using bisacryl, including the cost of the material, which my boss didn’t like, and the assistants’ preference for older techniques, such as relining the preformed crown.

In comparison to earlier materials, Pro-V C&B from BISCO offers strength and durability that’s superior, as the temporaries do not fracture easily. Pro-V C&B is called a “multi-function acrylic composite,” and it’s easy to add to a missed margin or fill an air bubble defect in the temporary. More specifically, Pro-V C&B is vastly superior to methyl methacrylates as far as stability (nonshrinking), viscosity, trimmability, and polishability are concerned. Its flexural strength is greater, and the esthetics are much more natural looking. Compared to bisacryl, Pro-V C&B is smoother and its surface is more polishable and esthetic.

Generally, the features I look for in a temporary crown-and-bridge material include good flow, non-slumping, non-shrinking, flexural strength, and natural look, i.e., easily shade matched and not excessively opaque. The only way to improve upon esthetics is to create a custom-fabricated multilayered composite temporary crown. My patients have been highly satisfied with the natural appearance of temporaries made with Pro-V C&B, which offers hue, chroma, and surface shine that replicates enamel in translucency and brightness.

I’ve found that Pro-V C&B saves time at every step of the temporary process. I used to have to run back to the lab bench lathe to trim, check the fit again chairside, and run back to the lab to polish. With Pro-V C&B it’s now so simple to trim and polish chairside.

Using Pro-V C&B, I recently made a temporary crown for a maxillary bicuspid freehand, forming it directly on the prepped tooth from the auto dispenser, and shaping it slightly using a plastic instrument. After it set, it required a little shaping and polishing. I checked the bite, and cemented it with non-eugenol temporary cement. It was the fastest temporary ever!
**5 STEPS, 4 MINUTES TO A HIGHLY ESTHETIC TEMPORARY**

*BISCO’s research and development of a temporary material culminated into Pro-V C&B, a multi-functional acrylic composite that produces esthetic results in about 4 minutes. The time-saving process is explained below:*

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<tr>
<th>Step 1, 2 and 3</th>
<th>Step 4</th>
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<td>Working time</td>
<td>Time left in the mouth</td>
<td>Removal from the mouth</td>
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<td>Curing time</td>
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<td>Finishing</td>
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**Step 1** – Before each use, extrude and discard a little material.

**Step 2** – Fill from the base upwards, keep the end of the mixing tip in the material.

**Step 3** – Insert into the patient’s mouth, applying slight pressure (Combined Steps 1-3 take a maximum of 40 seconds to complete from starting the mix.)

**Step 4** – Check the degree of hardness intraorally. Remove the temporary restoration between 1:30 min. and 2:30 min. after the start of mixing.

**Step 5** – After 4 min., the material should be cured completely. Once the temporary has been removed from the impression, completely wipe off the inhibition layer with alcohol. Use cross-cut burs and polishers to remove excess material, and finish the temporary.

**CLINICAL TIP**

My big pearl of wisdom from experience is to do a diagnostic waxup and make a polyvinylsiloxane form for the temporary. When this is not feasible, I place some utility wax in the defect, such as a broken cusp or abfraction, and take an alginate quadrant impression. I have found that when I take an alginate and dig the missing tooth part out of the impression, often the material replicates the defect, and I have to add to the temporary. It is easy to add to the temporary if necessary with more Pro-V C&B or a flowable composite. A little extra attention to detail saves time. —Dr. Bruce Howard

“Pro-V C&B has an ideal setting time, no distortion, and it trims and polishes great. This makes it an excellent option for fabrication of temporary anterior restorations.”

Kirk Poldek, DDS

**The Finishing Touch**

BisCover LV is a low-viscosity, light-cured resin formulation used to seal composite restorations while leaving a smooth polished/glazed surface. The liquid polish is resistant to staining and color shifting for more esthetic results. BisCover LV can be used inside and outside the mouth to finish direct, indirect, and provisional restorations.

The material offers 5 unique benefits:

1. Cures without an oxygen-inhibited layer, resulting in a high-gloss surface.
2. Fully cures with LED, PAC, and halogen curing lights.
3. Reduces or eliminates messy and time-consuming manual polishing steps.
4. Easily seals and protects to prevent microbial attack, prevent staining, and increase wear resistance.
5. Low film thickness eliminates occlusal adjustments.
BISCO maintains an active social media presence, particularly on YouTube where the company has nearly 2,000 subscribers.

"BISCO Bites" is a series on YouTube where viewers learn cool scientific facts related to dentistry, delivered in an entertaining format. Click here to watch an episode.

In the "Ro Knows" series, BISCO’s manager of clinical research, Dr. Rolando Nuñez, leads Facebook Live sessions. Click here to watch a recorded episode.

For Dr. Kirk Poldek, predictability, esthetics, durability, and fast working time all factor into his choice of temporary material. He and his team have been pleased with the success of Pro-V C&B.

Dr. Joseph Kim has found that Pro-V C&B creates a strong and durable restoration, reducing the risk of fracture when subjected to high or sudden masticatory loading in the mouth.

In this animation, BISCO demonstrates how Pro-V C&B achieves a highly esthetic result in about 4 minutes from the start of the mix.