



PREDICTABLE & EFFICIENT ANTERIOR RESTORATIONS:

UNLOCK THE POWER OF THE 3M™ FILTEK™ MATRIX

Introduction

Anterior cosmetic restorations can present challenges in many ways. Anterior teeth have intricate anatomy with contours and unique incisal edges, not to mention different opacities and translucencies. Replicating this complexity in a restoration while maintaining proper occlusion and function is difficult and requires skill and precision. Creating natural tooth-like structure can be an arduous process that takes hours of chair time, something that most patients do not look forward to. Furthermore, patients seeking cosmetic dental restorations in the anterior region often have high expectations for the final result. Meeting these expectations requires not only technical skills but also the ability to communicate effectively with the patient and manage their aesthetic desires.

Creating an attractive smile that complements the patient's facial features and personality requires a certain level of artistic flair. While dental schools teach the necessary technical skills, developing a true artistic touch often comes with experience and continuous improvement. Anterior cosmetic restorations are highly visible, and even minor imperfections can be noticeable. The margin for error is smaller in the anterior region compared to posterior teeth, where restorations are less visible.

However, modern innovations in dentistry and 3D printing technology are beginning to change these procedures by providing personalized solutions for predictable outcomes. 3M, a leader in composite restoratives, has recently launched the 3M™ Filtek™ Matrix which empowers dentists to create beautiful anterior restorations by taking the guesswork out of the equation. It combines digital technology and production techniques to make placing and shaping composite extremely simple.





The Benefits of the Filtek Matrix

The Filtek Matrix offers unique benefits to clinicians and patients alike:

Dentists:

- **Predictability** – With the Filtek Matrix, free-hand shaping for anterior restorations can become a thing of the past. The digitally designed reconstruction allows the dentist to preview the result and adjust as needed to achieve a perfectly customized restoration without all the stress.
- **Efficiency** – Efficiency is a key advantage of using the Filtek Matrix. Its straightforward and consistent steps eliminate much of the guesswork, making the restoration process more streamlined and time-effective. Dentists can seamlessly incorporate the Filtek Matrix system into their practices to create beautiful smiles in less time. This user-friendly system allows for a quicker and more precise composite application, benefiting both the dentist and the patient by reducing chair time and achieving excellent aesthetic results efficiently.
- **Productivity** – The Filtek Matrix can significantly boost production in dental practices by offering alternative treatments using this system that also streamlines the restorative process. Its user-friendly design and straightforward application allow dentists to work more efficiently, saving valuable chair time. With precise contouring and proper separation, the Filtek Matrix ensures predictable and reliable outcomes, reducing the need for time-consuming freehand procedures. This enhanced efficiency translates to increased productivity, enabling dentists to treat more patients and finish restorations with greater speed and accuracy.

Patients:

- **Conservative** – Maintaining healthy tooth structure is of utmost importance for ensuring optimal long-term oral health. A conservative approach to dental restorations not only enhances the tooth's strength and integrity but also promotes the longevity of the restoration itself. Filtek Matrix procedures are typically additive and maintain healthy tooth structure, leading to a more conservative design than other more invasive ceramic procedures. By preserving a greater amount of the natural tooth, the potential for future issues like sensitivity and fractures is significantly diminished.
- **Cost-effective** – Patients will appreciate the reduced chair time, but so will their wallets! Using the Filtek Matrix can reduce visits and lessen time in the operator, which can make it more cost-effective than treatments such as porcelain veneers and orthodontics. This is the perfect opportunity for patients who have been putting off a restoration due to the associated cost.
- **Quick** – The Filtek Matrix offers a quick and efficient process, usually requiring only two appointments: one for taking a digital scan or impression, and one for composite placement. This streamlined approach helps save time, making the restoration process more convenient and hassle-free.



When to Use the Filtek Matrix

When considering the use of the Filtek Matrix in dental practice, several patient scenarios make it an attractive option. For individuals with past cases who did not accept veneers, the Filtek Matrix presents an excellent alternative for cosmetic restorations. Some patients may be hesitant to undergo invasive procedures like veneers, and the conservative nature of Filtek Matrix allows dentists to achieve aesthetic improvements without compromising healthy tooth structure.

The Filtek Matrix is particularly suitable for patients with specific dental issues, such as diastema and peg laterals. These cases often require precise contouring and shaping of composite materials to achieve a seamless, natural appearance. With the Filtek Matrix, dentists can create custom contours to close diastemas and improve the shape of peg laterals, resulting in beautiful and harmonious smiles for their patients.

The Filtek Matrix is also a valuable option for post-orthodontic restorations. After completing orthodontic treatment, patients may have teeth that require cosmetic improvement or minor corrections. The Filtek Matrix provides an efficient and conservative method to address these issues, allowing for efficient composite application and delivering satisfying outcomes. This approach is particularly beneficial since patients who have undergone orthodontic treatment are often eager to achieve a refined, attractive smile.

By identifying suitable cases and obtaining patient acceptance, dentists can confidently incorporate the Filtek Matrix into their practice, enhancing smiles and ensuring patient satisfaction.

Straightforward				Complex		
Peg Laterals	Single Diastema Closure	4 Maxillary Composite Veneers	Multiple Diastema Closures	Full Maxillary Case (1st premolar to 1st premolar) Diastemas/Veneers/Worn Dentition	Mandibular Case (Canine to Canine) Diastemas/Veneers/Worn Dentition	Full Maxillary/Mandibular Combination Case

Peg Lateral



Photos courtesy of Dan Poticny, DDS, PA

Diastemas



Photos courtesy of Lois Duerst, DDS



Tested by Dental Advisor

90%

CLINICAL RATING



"THE FINAL RESTORATION
WAS VERY ACCURATE AND
LOOKED EXACTLY LIKE THE
MOCKUP."

Evaluators' Comments

"Having that initial shape is wonderful. It looks like it would be hard to trim after you open the doors, but it trims very quickly."

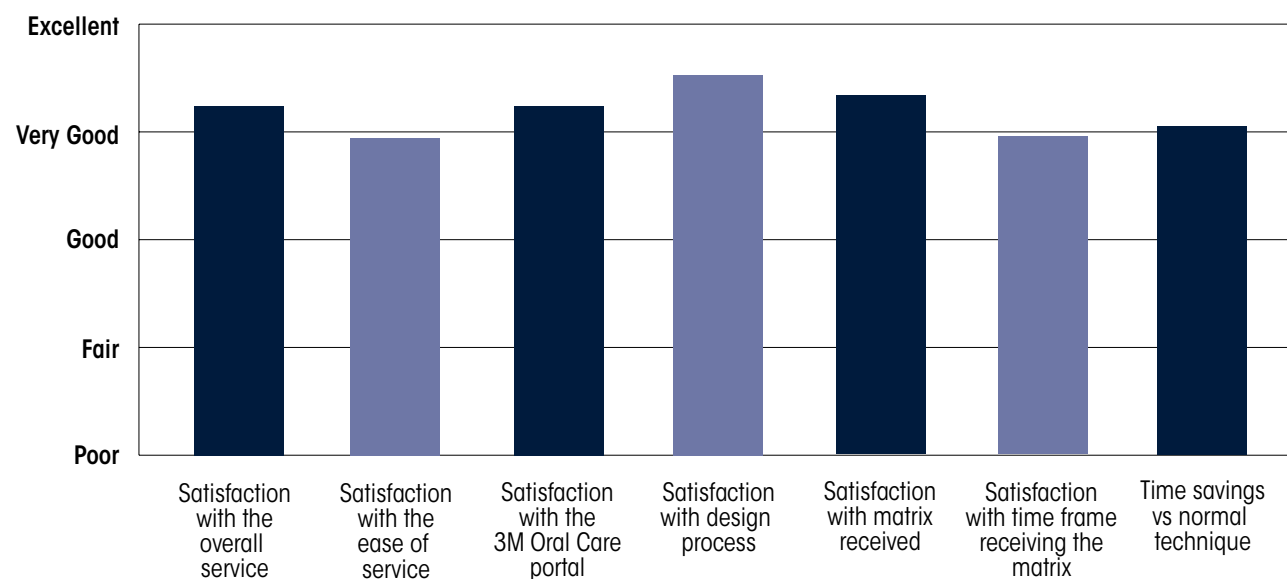
"**3M™ Filtek™ Matrix** reduced my chairside time into less than half and gave amazing veneer like results in a very conservative way."

"The final contours and esthetics of the composite veneers was great. My patient and I were both very pleased with the result."

"I was pleasantly surprised at how there was not much excess composite interproximally."

"This could be extremely helpful to clinicians who do not feel comfortable freehanding composite veneers."

Evaluation Summary:



Consultants who would:

83%

Recommend to a colleague

Consultants who would want to stock in office:

33%

Yes, replacing my existing technique

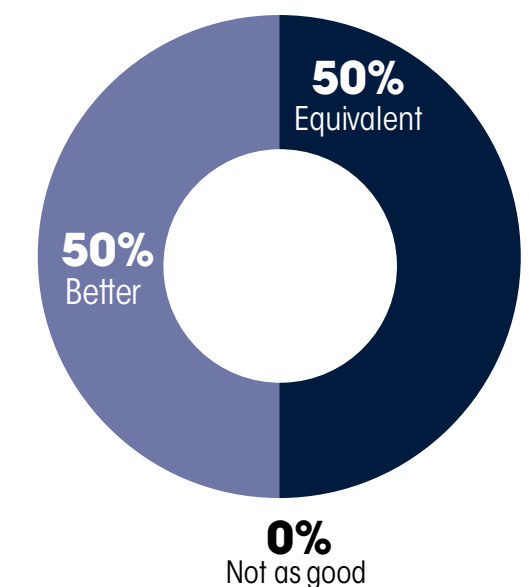
50%

Yes, in addition to my existing technique

17%

I might want to order this product for certain cases

Compared to Alternative Techniques:





Clinical Tips from our Evaluators:

- Place and cure 3M™ Filtek™ Supreme Flowable Restorative at the gingival margin to help minimize the potential for voids.
- Be sure to watch the instruction video - the process is extremely easy.
- Avoid excessively overfilling the matrix as excess composite may lock into the matrix making it more difficult to remove from the patient's mouth after light curing the composite.
- Great for large case composite veneers and ideal if freehand veneers are new to you.
- Use digital impressions to avoid the need to ship impressions and eliminate the time required for digitization.
- Try a few cases; I suspect the process gets easier and easier.

How to Talk to Your Patients About This New Treatment Option

Introducing any new treatment to patients requires effective communication and education. To ensure a seamless patient experience, it is essential to educate the entire dental team about the benefits and features of the Filtek Matrix. Conducting training sessions or workshops can help the team gain a comprehensive understanding of the treatment and its advantages, enabling them to address patient inquiries confidently.

Hygienists and staff members play a crucial role in initiating conversations about the Filtek Matrix with patients. During routine check-ups and cleanings, hygienists can take the opportunity to introduce the new treatment and its cosmetic benefits. They can inform patients about the Filtek Matrix's conservative approach, which preserves more natural tooth structure while achieving beautiful smiles. By providing patients with this information, they can start considering the treatment as a viable option for their dental needs.

Asking patients about their satisfaction with their smiles is an excellent way to gauge their interest in cosmetic dental treatments. During dental consultations or even casual conversations, dental practitioners can inquire if patients have any concerns or desires regarding their smile's appearance. By listening attentively to their responses, dentists can identify suitable candidates for treatment and tailor their recommendations accordingly.

Through open communication and patient education, dental practices can successfully introduce and incorporate the Filtek Matrix as an attractive option for cosmetic dental restorations.





The Seamless Filtek Matrix Digital Workflow

The Filtek Matrix offers a seamless and efficient digital workflow, providing dental practitioners with a state-of-the-art treatment solution. The process begins with taking records, where any high-quality .stl file from an intraoral scanner, suitable for full arch scans and multi-unit restorations, is accepted. These digital files can be directly uploaded into the 3M™ Oral Care Portal, streamlining the data transfer process and saving valuable time. Alternatively, traditional impressions can be submitted and digitized, although this may result in a slightly longer lead time due to additional steps involved.[†]

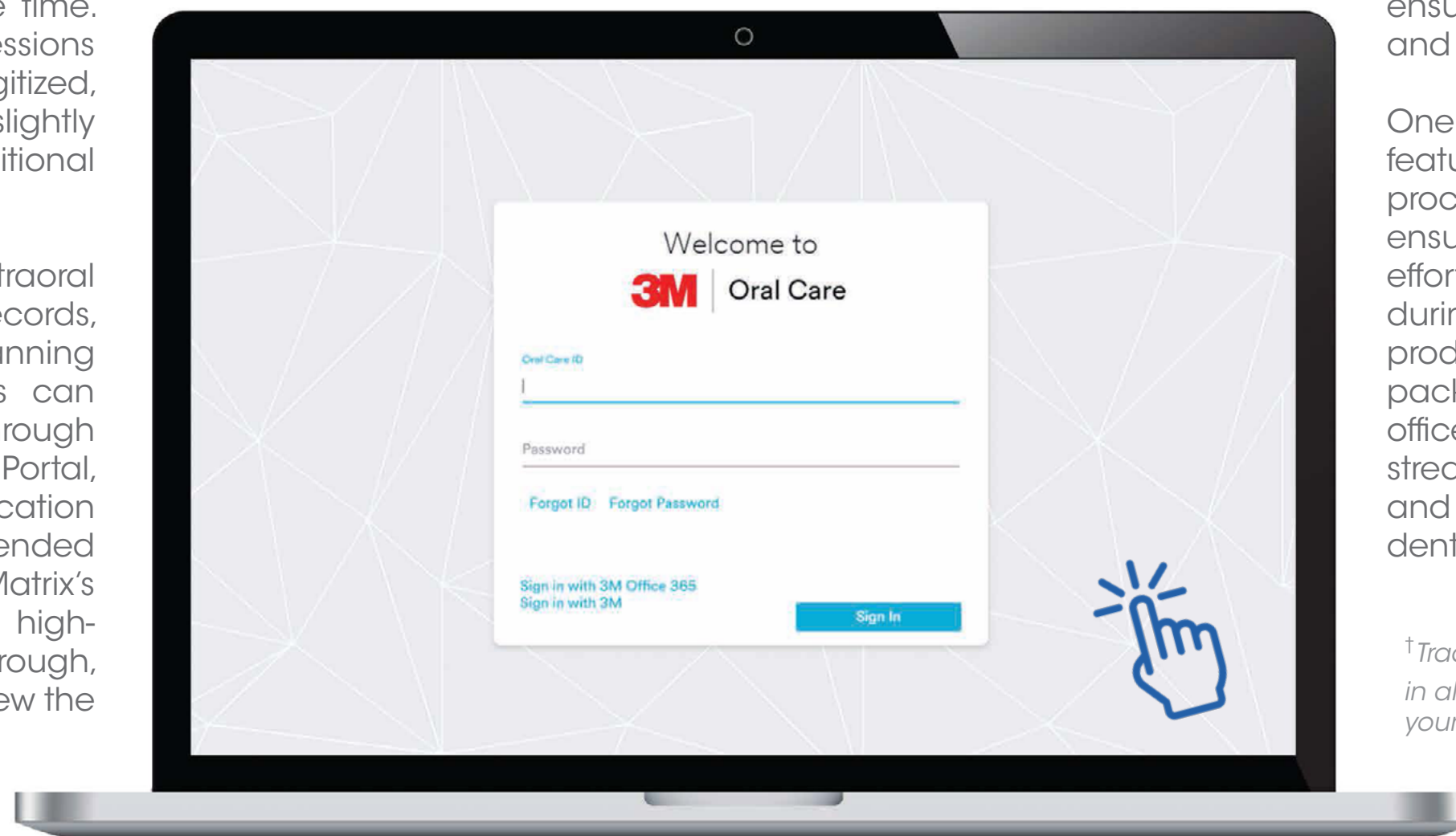
As part of the digital workflow, intraoral photos complement the records, enhancing the treatment planning process. Dental practitioners can submit their prescriptions through the user-friendly 3M™ Oral Care Portal, ensuring clear communication and alignment with the intended treatment plan. The Filtek Matrix's digital workflow allows for a high-level treatment walk-through, enabling dental teams to review the proposed design and make any necessary adjustments collaboratively.

The Filtek Matrix's digital workflow incorporates a powerful 3D-viewer, showcasing various functionalities that aid in treatment planning and visualization. Dental practitioners can experience a comprehensive view of the proposed restoration, enhancing decision-making and precision during the design phase. 3M's industrial-grade 3D-printers are instrumental

in manufacturing the Filtek Matrix, ensuring a high level of accuracy and consistency in the final product.

One of the Filtek Matrix's standout features is its proprietary post-processing technique, which ensures that composite materials effortlessly release from the matrix during restoration placement. After production, the Filtek Matrix is expertly packaged and shipped to the dental office, arriving ready to use, further streamlining the restorative process and providing convenience for the dental team.

[†]Traditional impressions are not accepted in all areas for Filtek Matrix cases, talk to your 3M rep for more information.





Composite Filling Technique

The 3M Filtek Matrix Composite Filling Technique is a predictable and efficient process for creating composite restorations. Here is a step-by-step guide for performing this technique.



Initial presentation



Injecting 3M™ Filtek™ Supreme Flowable Restorative Composite to line the gingival margin before adding 3M™ Filtek™ Supreme Ultra Universal Restorative.



Building incisal edges with 3M™ Filtek™ Supreme Ultra Universal Restorative



Initial case after removal of matrix



Finishing

Photos courtesy of Dr. Sabiha Bunek



Final result

- 1. Try on Veneer Matrix:** Begin by trying on the veneer matrix to ensure a proper fit over the teeth. This matrix will be used as a guide for the restoration process.
- 2. Etching:** Apply etchant on the teeth to create a suitable surface for bonding. After the appropriate etching time, rinse off the etchant thoroughly.
- 3. Adhesive Application:** Apply adhesive on the prepared teeth, making sure not to bond the contacts. Air dry the adhesive, and then use a curing light to activate and set the adhesive in place.
- 4. Placement of Lingual Matrix:** Position the lingual matrix onto the teeth, ensuring it fits snugly against the tooth surfaces.
- 5. Placement of Labial Matrix:** Place the labial matrix over the teeth, and gently clamp the matrices together on their distal ends to secure them.
- 6. *Gingival Margin Lining:** Line the gingival margin of the matrices with flowable composite, creating a seal between the matrix and the tooth.
- 7. *Curing the Flowable Composite:** Close the door of the Filtek Matrix and light cure the flowable composite for the recommended time.
- 8. Universal Composite Placement:** Open the door and place the universal composite material into the matrix cavity. Slightly overfill the cavity to reduce potential for a gap between the composite and the door.
- 9. Closing the Door:** Close the door of the Filtek Matrix, ensuring excess composite is removed around the door and gingival margin. Clear the vent port of any composite.
- 10. Curing the Universal Composite:** Light cure the universal composite for the specified time per surface. Repeat steps 6-10 for all cavities that need restoration.
- 11. Matrix Removal:** Open the doors of the Filtek Matrix and remove the labial matrix first, followed by the lingual matrix.
- 12. Checking Interproximal Contacts:** Verify the interproximal contacts using dental floss to ensure proper fit and alignment.
- 13. Adjusting Contacts (if necessary):** If the interproximal contacts are too tight or not properly aligned, separate and smooth them using dental tools like burs, blades, saws, or strips.
- 14. Removing Flash and Contouring:** Remove any excess composite and contour the teeth using burs or Sof-Lex discs.
- 15. Finishing and Polishing:** Achieving a smooth and polished surface is a critical step in creating an esthetic final outcome.
- 16. Final Outcome:** After completing the composite filling procedure using the 3M Filtek Matrix technique, evaluate the final outcome for aesthetics, function, and patient satisfaction. Ensure the restorations meet the desired goals and provide a lasting and aesthetically pleasing result.

*If using warmed composite, steps 6 & 7 are optional



Conclusion

Incorporating the Filtek Matrix into dental practice offers numerous benefits. The ease of use for dentists, along with the predictability and efficiency it brings to the restorative process, enhances overall production and patient satisfaction. Its conservative nature and cost-effectiveness provide a fast and efficient alternative for patients who may have declined veneers in the past, have diastema or peg laterals, or require post-orthodontic restorations. Clinical evaluation highlights the positive outcomes achieved with the Filtek Matrix, further reinforcing its reliability and efficacy.

When discussing this new treatment with patients, educating the entire dental team becomes pivotal, ensuring a cohesive and informed approach. Effectively communicating the benefits and advantages of this treatment to patients will help them make informed decisions about their dental care. Hygienists and staff members play a crucial role in initiating conversations with patients, and dentists can inquire about their smile satisfaction to identify potential candidates for the Filtek Matrix.

The Filtek Matrix's digital workflow streamlines the restorative process, allowing for precise and accurate records through scanning or traditional impressions.[†] Intraoral photos further enhance treatment planning, and the 3M™ Oral Care Portal simplifies prescription submission for seamless communication. The innovative 3D-viewer and industrial-grade 3D-printers ensure consistent and high-quality manufacturing of the Filtek Matrix, while proprietary post-processing ensures easy composite release from the matrix. With the matrix shipped ready to use, this efficient workflow saves valuable chair time and enhances the overall restoration process.

Overall, the Filtek Matrix stands out as an excellent choice for dental professionals seeking conservative, predictable, and efficient cosmetic restorations, elevating patient care and satisfaction. Its incorporation into practice brings numerous advantages and reflects the commitment to providing the best possible dental solutions for patients' needs.

[†]Traditional impressions are not accepted in all areas for Filtek Matrix cases, talk to your 3M rep for more information.



Product insights you can trust.

LEARN MORE:

Since 1983, DENTAL ADVISOR has been a trusted expert to dental professionals worldwide with concise, accurate, and objective information. We combine clinical experience with laboratory data and report on long-term in-vivo performance of materials over time. The mission of DENTAL ADVISOR is to provide the dental profession with evidence-based and clinically relevant information on dental restorative products, infection control products and dental equipment. DENTAL ADVISOR reports objective clinical evaluations, product comparisons, comprehensive long-term clinical performance studies, and unbiased laboratory test results.

3M™ FILTEK™ MATRIX CLINICAL EVALUATION

CLINICAL EVALUATION

3M™ Filtek™ Matrix

3M www.mmm.com/dental

dentaladvisor.com RATING SYSTEM: Excellent +++++ Very Good ++++ Good +++

6 CLINICAL EVALUATORS

16 TOTAL USES

90% CLINICAL RATING

Key features: Digitally Fabricated • Precision Matrix • Unique delivery

Description

3M™ Filtek™ Matrix is a unique customized anterior matrix system that is designed for predictability, efficiency and conservative dentistry. The digitally produced matrix fits your patient and allows for direct placement, creating easy to place anterior composite restorations.

Indication

Clinical Tips

- Place and cure 3M™ Filtek™ Supreme Flowable Restorative at the gingival margin to help minimize the potential for voids.
- Be sure to watch the instruction video - the process is extremely easy.
- Avoid excessively overfilling the matrix as it may lead to more difficult removal after light curing.
- Great for large case composite veneers and ideal, if freehand veneers are new to you.
- Use digital impressions to avoid the need to ship impressions and eliminate the time required for digitization.
- Take a few steps. Leupold the

“THE FINAL RESTORATION”

3M™ FILTEK™ MATRIX PRODUCT PAGE

A new option for your patients means a new opportunity for you.

Introducing the 3M™ Filtek™ Matrix. See how it can help you offer your patients the anterior restorative solution they've been waiting for.

SEE HOW IT WORKS

Jump to:

[About Product](#) | [How it Works](#) | [Clinical Cases](#) | [Testimonials](#) | [Technical Profile](#) | [Composite Selection](#) | [Connect](#)

Great smiles, simplified.

Offer your patients the direct anterior restorative solution they've been looking for with the 3M™ Filtek™ Matrix. The Filtek Matrix is a digitally designed customized anterior matrix system. This new solution streamlines conservative, composite treatment—bringing a smile to you and your patients.

The Filtek Matrix offers:

- Predictable Outcomes: Increased confidence with results aligned to digital design.

3M™ FILTEK™ MATRIX CLINICAL CASE VIDEO

Warmed 3M™ Filtek™ Supreme Ultra Restorative was placed, slightly overfilling

3M™ FILTEK™ MATRIX TESTIMONIAL VIDEO