Dental News Today

Introducing: The Buttefly Matrix The All-In-On Anterior Strip & Wedge



In anterior direct restorations, Class III, IV, and composite veneer restorations, it is essential to adequately separate, protect and isolate the operating area and the adjacent teeth during the bonding procedures.

In November 2023, the dental community welcomed the introduction of the Butterfly Matrix strip, garnering praise from dentists who have incorporated it into their daily routine. Developed by Dr. Sigal Jacobson from Australia, the inventor of Uveneer and Paladex systems. The Butterfly Matrix emerged as a solution to the challenges posed by traditional methods for anterior tooth separation and isolation such as flimsy celluloid strips, teflon tape and stiff wedges. This innovative strip functions not only as a strip and wedge, but also addressing multiple challenges in a single tool.

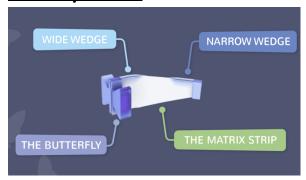
The Existing Options:

Currently, dentists utilize anterior separators such as Teflon tapes, cellulose strips, accompanied by stiff wedges (wood or plastic). However, these methods present several challenges. Cellulose strips often struggle with insertion in tight spaces and do not hold in place in cases involving diastema. They also require manual support during work to prevent interruption of the final restoration shape. Similarly, Teflon tapes can be difficult to insert and remove, leaving residues at the contact points and obstructing visibility during procedures.



Both options are also susceptible to disruption by suction during the rinsing step of the etch and may need to be reapplied. Stiff wedges are used in many cases to prevent overhang of filling material into the embrasures and to exert slight pressure on the periodontal ligament (PDL), facilitating the creation of an ideal contact point upon removal. However, rigid wedges pose their own challenges, including the creation an unnatural black triangle shape in the final restoration and post-removal bleeding, which may lead to peripheral staining of the final restoration.

Benefits and Features of the Innovative Butterfly Matrix



The Matrix Strip:

Crafted from flexible, soft, and transparent material is designed to offer easy insertion and removal, separate and isolate the adjacent tooth while maintaining visibility of the teeth during procedures.

The Integrated Soft Wedge:

There are two sizes of wedges on each side to accommodate any embrasure size. The wedge conforms seamlessly to any embrasure shape preventing gingival overhang of the filling material while ensuring the patient comfort during work. Moreover, the gentle pressure exerted on the papilla by the soft wedge stops and

isolates the bleeding from the papilla, ensures an optimal bonding environment.

The Butterfly Section:

Acts as a stopper whilst securely anchored from the palatal side, ensuring stability throughout the procedure, even in cases of diastema. This design facilitates hands-free work, preventing disruptions when using suction. Moreover, the butterfly serves as a palatal key for class III restorations. In those cases that the cavity is on the palatal side the butterfly stopper can be applied from the buccal side.



Palatal view of Butterfly Matrix

Furthermore, this smart tool offers more advantages: through its stretching action toward the adjacent teeth, it facilitates the establishment of an optimal contact point. This is due to the gentle pressure exerted by the elastic strip on the periodontal ligament (PDL) of the pulled tooth, resulting in the formation of a micro-gap between the teeth, resembling the action of a wedge. When the strip is removed, this gap naturally closes, ensuring precise and seamless contact points.

The Butterfly Matrix is available in a single size but can be adjusted to accommodate various teeth sizes. The strip and the butterfly feature can both be trimmed with scissors to fit smaller teeth and primary teeth.

The Butterfly Matrix is a game-changer in the anterior region restorative work. Its easy-to-use design and flexible soft material offer multiple benefits that make anterior restorative work simpler and more comfortable for both dentists and patients.

For more information, please contact us at: info@bdentalmatrix.com

To purchase or find your supplier please visit our website: www.bdentalmatrix.com

How to use the Butterfly Matrix



Step 1: Gently stretch and pull the matrix between your fingers.



Step 2: Slide the matrix between the teeth using a backand-forth sawing motion.



Step 3: Pull the Butterfly strip towards you and engage the soft wedge firmly into the embrasure space



Step 4: Secure the matrix distally by grasping the strip between two fingers and pulling (as you would when holding dental floss), insert using a gentle force between the space of the distal teeth.



Final Insertion View



An **alternative method** of insertion:

In cases involving bridges or very tight contacts. After applying steps 2-3 pull the strip distally and insert a stiff wedge to pierce a hole in the strip, and then insert the wedge towards the papilla. This effectively secures the strip at the papilla.