



# 3M™ Filtek™ Supreme Flowable Restorative

Unightly black triangles, a tricky restorative procedure made easy with flowable composites and warming.

Clinical dentistry and photography by: Dr. Michael Cai.

# Case Study

## About the Case

The patient, a male in his mid-30s presented to the practice requesting improved esthetics of the lower anterior teeth. Dark/black triangles had developed after fixed orthodontic treatment implemented to correct moderate to severe anterior crowding of the lower anterior teeth. Initially a referral was made to a periodontist for possible gingival and bone grafting procedures, but it was deemed unpredictable in this case. Other restorative options offered to the patient included indirect restorations: veneers and crowns. These were not a conservative option due to the aggressive nature of the required preparations to achieve the desired esthetic result. Patient opted for a minimally invasive approach.



**Initial situation:** A fracture on the upper-right central incisor is evident on this pre-operative facial view.

### Challenge:

Traditional composite bonding techniques including the use of cellular strip and sculptable composite resin can be cumbersome to manage interproximal embrasure areas and contacts. Patient was happy with ortho treatment result but very conscious of the resultant dark triangles.

### Step 1

#### Before orthodontic treatment.

Pre ortho photo of lower arch. Depicting moderate to severe crowding of lower anterior teeth. Ortho Treatment was approximately 12 months duration.



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### Step 2

#### Pre-treatment.

Pre-treatment smile, frontal. Presentation of black triangles in the lower anterior region. Patient also had a fixed lingual retainer that needed to be removed before the restorative procedure commenced.



### Step 3

#### Assessment.

Pretreatment intra oral retracted photo.



### Step 4

#### Closer inspection.

Close up – of black triangles between 42, 41, 31 and 32.



### **Step 5**

#### **Isolation.**

Rubber dam isolation. No LA required as this procedure is atraumatic and does not require any removal of tooth structure. Meticulous removal of biofilm before commencing bonding procedure is essential to allow optimal bond strength to uncut enamel and infinity edge margins.



### **Step 6**

#### **Insertion and etching.**

Anterior Bioclear® matrices inserted and application of 3M™ Scotchbond™ Universal Etchant. Note: no requirement of wedges to stabilize matrices.



### **Step 7**

#### **Adhesive.**

Bioclear® matrices with application of 3M™ Scotchbond™ Universal Adhesive. Rub 20s, air thin and cure 10s.



### **Step 8**

#### **Injection of restorative.**

3M™ Filtek™ Supreme Flowable Restorative injected followed by warmed 3M™ Filtek™ Supreme Ultra Universal Restorative (B1) sculptable composite resin, then cured for 20s.



**Step 9**

**Pre-polishing.**

Composite curing completed, matrices removed, pre-polishing.



**Step 10**

**After polishing.**

Frontal smile photo, final result after finishing and polishing.





**Before**

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The use of Bioclear® matrices (anterior) allowed the achievement of anatomical form.



**After**

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The combination of 3M™ Filtek™ Supreme Flowable Restorative and warmed 3M™ Filtek™ Supreme Ultra Universal Restorative sculptable composite created the perfect viscosity to wrap around the interproximal surfaces of the lower anterior teeth making what was once a difficult task, very simple. Also, the very challenging color match with B1 resulted in a pleasing esthetic outcome for the patient.