Class IV restorations are probably the biggest aesthetic challenge especially for hiding the margin. The base of the StyleItaliano philosophy, was established with the CBT technique (controlled body thickness) where everything from the color matching stage to the build-up and eventual corrections are strictly calibrated with the rule of 0.5mm of enamel. A winning strategy in most cases.

This strategy is extremely efficient when planning the case with the help of a personalized shade guide (My Shade Guide, Smile Line). Knowing that building a personalized shade guide unfortunately is not feasible for many colleagues, some companies decided to make the official “Styleitaliano” recipes, in order to be able to make the color match stage with the VITA classical shade guide and use the proposed color combination.

As an example, in this case the material used was Filtek Supreme XTE (3M ESPE)... which was performed following these recipes

WD + A2E = A0
A1D + A3E = A1
A2D + A3E = A2
A3D + A3E = A3
A4D + A3E = A3,5
A4D + A4B = A4

The enamel shade is always 0.5mm
The initial case shows a young patient coming with an emergency to the office one hour after fracturing his central incisor. No particular pain but the sensitivity when applying air or cold water due to the dentinal exposure. No pulp complication was found.
Immediately the color is taken, while teeth are completely hydrated, and the tab which matches the most was A2 from the VITA classical shade guide. We know at this exact moment what are the colors to build two layers and have a final A2 shade.
Close-up of the color matching stage. At this stage, the dentin is sealed with adhesive, polymerized and the patient recalled after a couple of days in order to have a one hour appointment with a wax-up from the laboratory.
On the second appointment, the patient will be anesthetized and the teeth isolated. A silicon index was taken from the plaster model and now we will use it to build the palatal enamel layer.
In this case we selected a chamfer-like finishing line, prepared with a No.1 fine grit diamond bur, in order to be able to blend the composite in a small margin which is resistant. Authors suggest frequently this kind of margin and the medium bevel.
Selective enamel etching was done, slightly over-etching the vestibular enamel.
Rinsing of the acid etchant, generously, with water during 20 seconds.
Application of a multi-mode generation universal bonding agent (Scotchbond universal, 3M ESPE). This agent must be scrubbed during 20 seconds, author suggests to let it act still for at least an extra 20-40 seconds and then carefully thin with air before polymerizing.
Polymerization is done during one minute with a high power lamp (Elipar deep cure), to do a good conversion of the adhesive, making this way the highest quality hybrid layer. In order to do this successfully, high power lamps deliver much energy and thus much heat, to polymerize for one minute may be a cancer for many clinicians, the suggestion is to blow air during this minute.
A mark is done between the palatal cavo-surface angle and the silicone index, in order to limit the area where we are going to place the palatal enamel.
With this line we can know exactly where the palatal enamel will be located, avoiding to do it intraorally and gaining much precision while constructing this layer outside the mouth.
Enamel is placed without crossing the line. Of course the smoothening of the composite can be done now or inside the mouth, depending on how convenient or conformable is for the clinician.
Once the palatal layer was placed, smoothed and polymerized, we can remove the silicone index, from now on it will not be helpful anymore.
building up the proximal walls
- The distal with the help of a posterior matrix
- The mesial free hand due to the presence of a diastema

Once the stratification ‘box’ is polymerized, is time to place the dentin.

Then the dentin A2 was placed and calibrated with this special instrument ‘Misura’ (LM Arte, LM instruments, Finland). This step is of extreme importance. It gives us the exact space needed for our enamel. Which corresponds to the 0,5mm we have in our personalized shade guide (if used) and that corresponds to the recipe created by Styleitaliano for Filtek Supreme XTE (3M-ESPE).
As an optional step, we can copy the mamelons features and calibrate again.
After polymerizing the dentin, some opaque white characterizations are inserted. Using the WD ('White Dentin) some spots were created above the dentinal core and a roll was placed in the incised edge in order to imitate the incisal halo.
Enamel A3 is placed and smoothed with the `Modella´ instrument (LM Arte, LM instruments, Finland) and brushes. Final Polymerization can be done.
Final polymerization should have the same characteristics as the polymerization of the Bonding. We can opt to place some oxygen blocking agent as Glycerin or similar and polymerize.
Initial contouring (primary anatomy) is done with discs. While we copy the morphological characteristics of the neighbour tooth with a pencil to reproduce them immediately afterwards. With a low-speed diamond bur we will smooth all the composite surface before starting the reproduction of the morphology features.
We place the pencil marks ‘mirroring’ the contralateral tooth and with the same bur for the primary finishing we can reproduce the secondary and tertiary texture.
The secondary texture must be thoroughly worked, the risk of having two ugly `bur marks` is high, the bur must work from side to side in order to smooth and have this wave appearance. This stage takes the most time, it needs the most precision and thus our best attention.
For the fine finishing we will use a sof-lex spiral disc, during one minute making touch and go movements with an up-low direction.
For the polishing and gloss we will use the white sox-lex spiral disc, it is optional for the clinician to use them in combination with a paste or dry. In case of using them dry, a final felt can help very much for an extreme high gloss.
The case immediately after rubber dam removal, we must not worry about the color difference, this will be evaluated after the rehydration of the teeth.
Control stage, after one month the teeth were rehydrated and now the composite is well integrated.

Conclusions:

Working with a feasible and repeatable method allows us to create high end aesthetic restorations in an easy way. The color issue will become nothing after practicing this strategy few times.

References

8.- http://www.styleitaliano.org/controlled-body-thickness-part-1
9.- http://www.styleitaliano.org/controlled-body-thickness-part-2
10.- http://www.styleitaliano.org/controlled-body-thickness-part-3
11.- http://www.styleitaliano.org/personalized-shade-guides
12.- http://www.styleitaliano.org/how-misura-works-lm-arte-purple-instrument

Visit: http://proyectoshm.com/style/recipe-for-class-iv-restorations