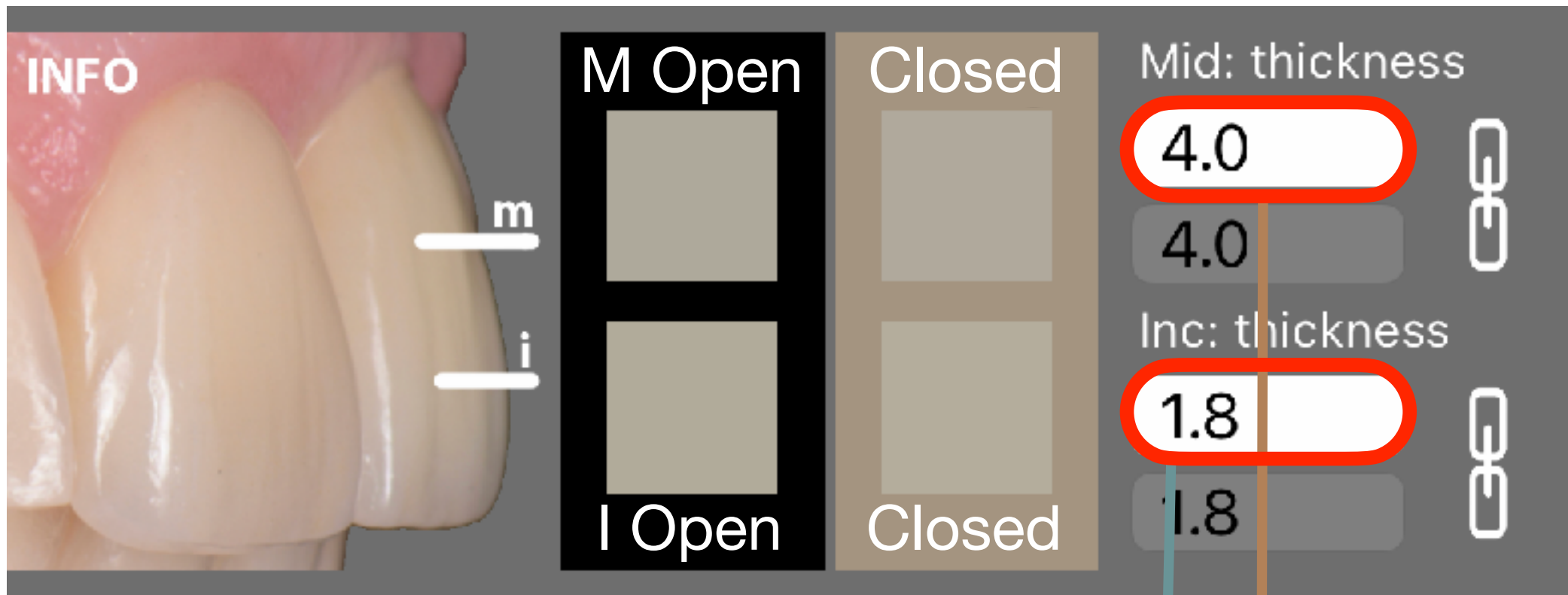
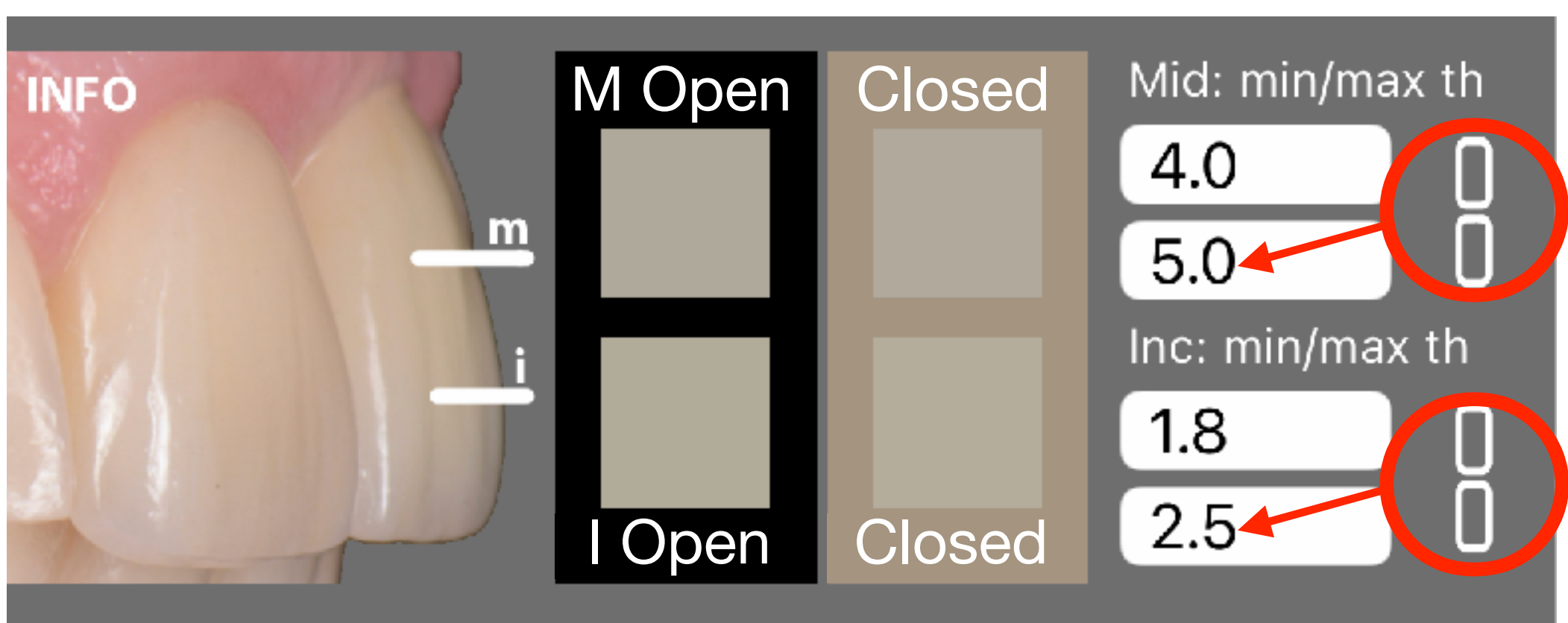


# Thickness

1- Insert the tooth thickness values of the Mid (middle) and Inc (incisal) region.

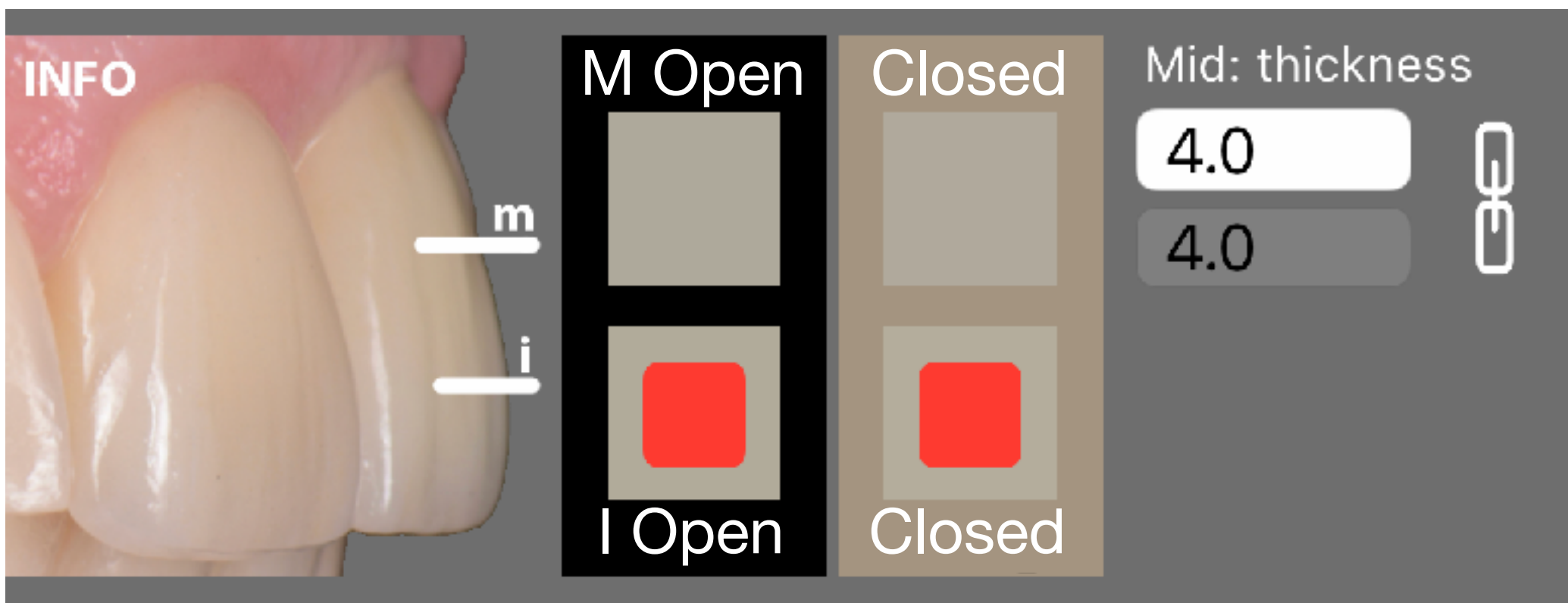


2- (Optional) Click the Unlink button and insert the thickness values intervals.

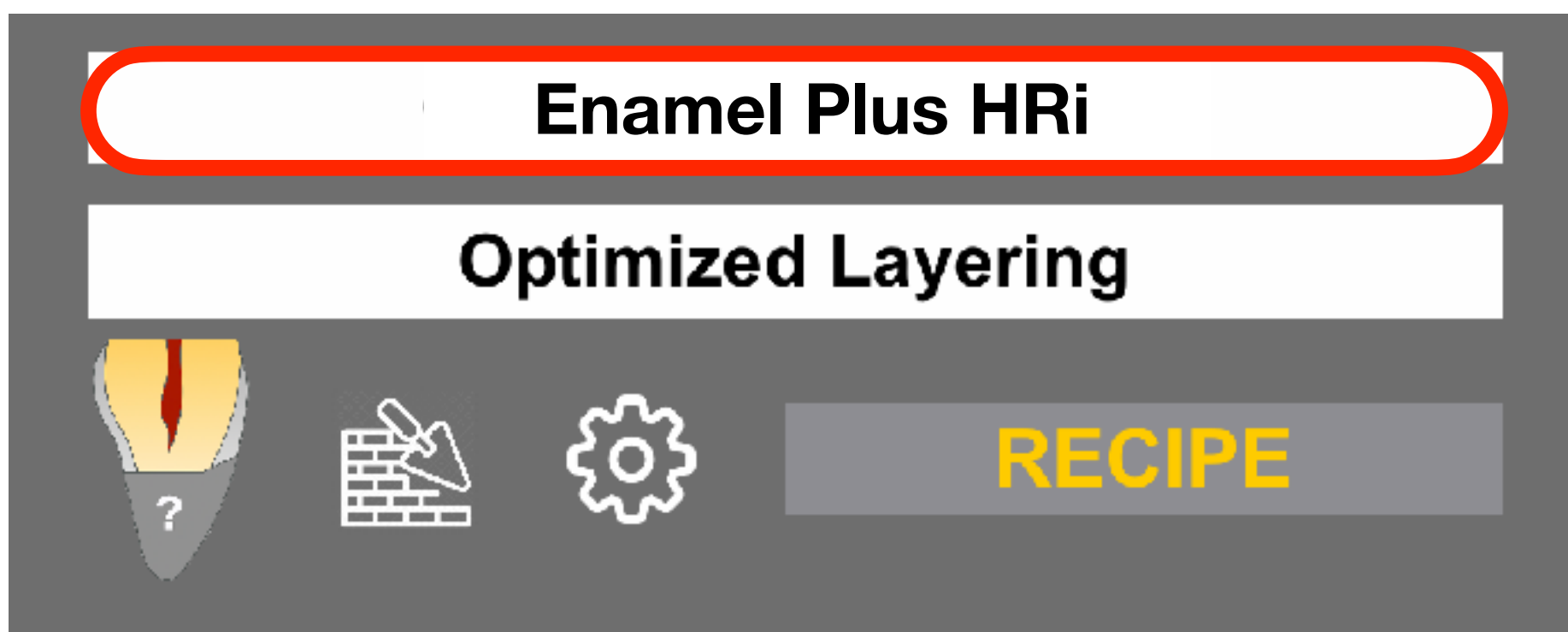


This function is useful when you don't get a recipe at the first try but you have the option to increase the restoration thickness. In this example, the software will calculate recipes for a tooth that has a thickness between 4.0 and 5.0 mm in the cervical and and 1.8 and 2.5 in the incisal region. In other words, it will have more freedom and will be able to propose more recipes.

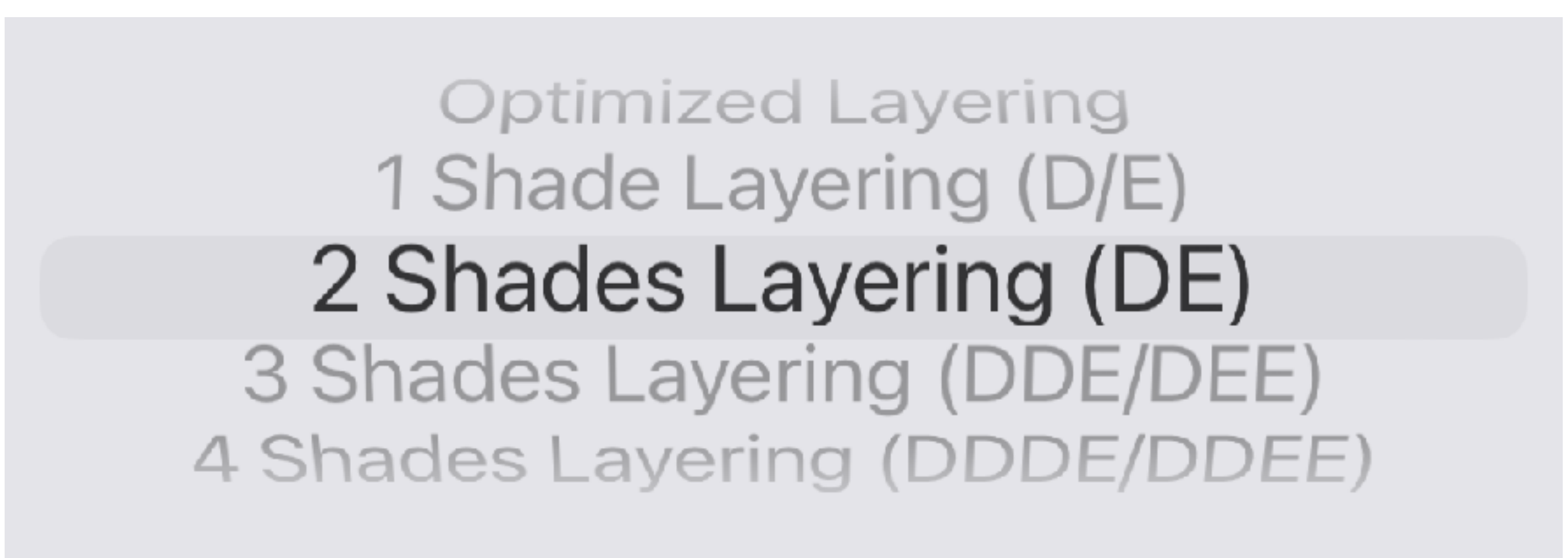
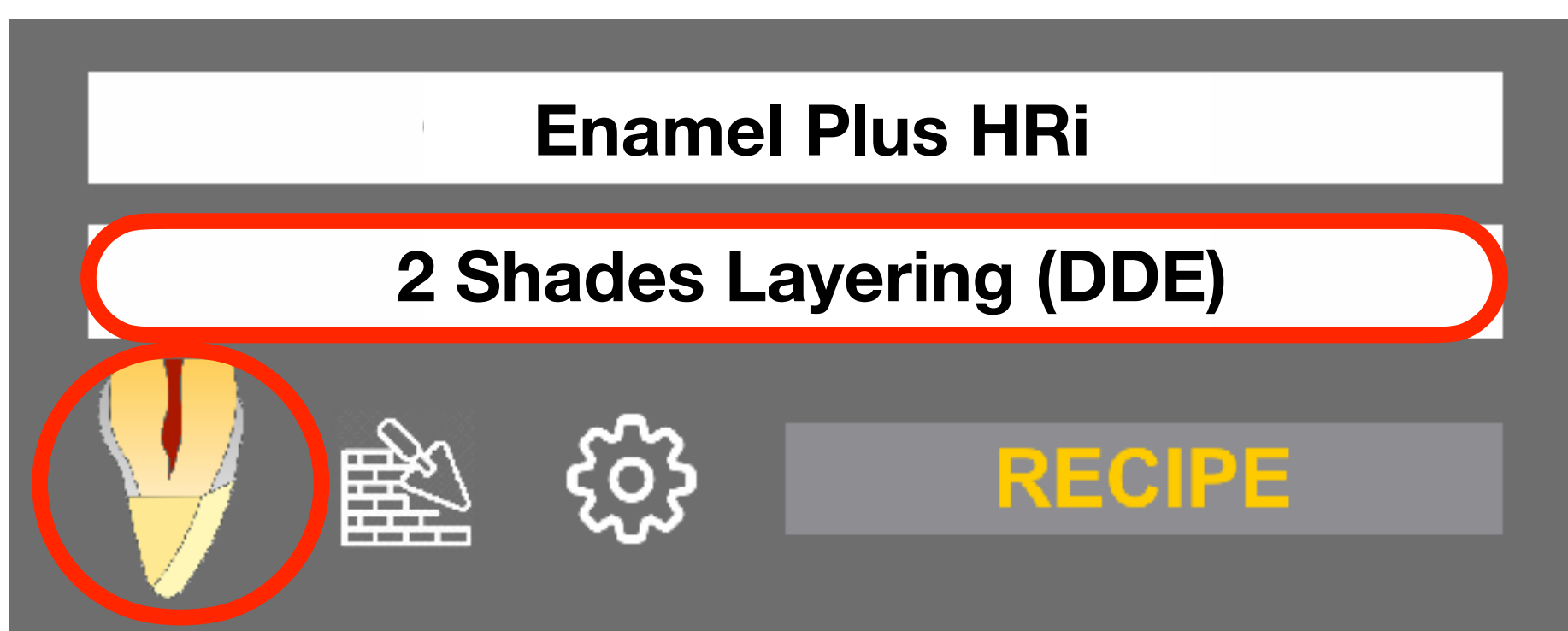
3- (Optional) Click the squares in case you want to exclude a region from the calculations. Thickness field will disappear.



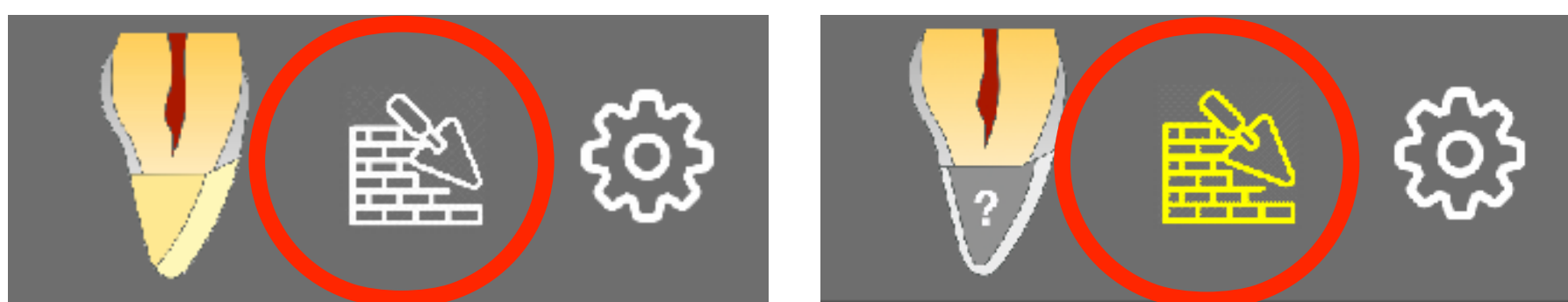
4- Select the composite system from the scrolling list. 2 composite systems are available Enamel Plus HRi and Enamel Plus Bio Function, with various shade kits.



5- Define a layering strategy. The selected layering strategy will be displayed with an image. Select Optimized Layering to find the simplest layering strategy compatible within the “good Layering Match DE” on the expert user settings section.



6- Clicking on the “wall” icon will include the use of a palatal wall. When the icon is yellow it is activated.

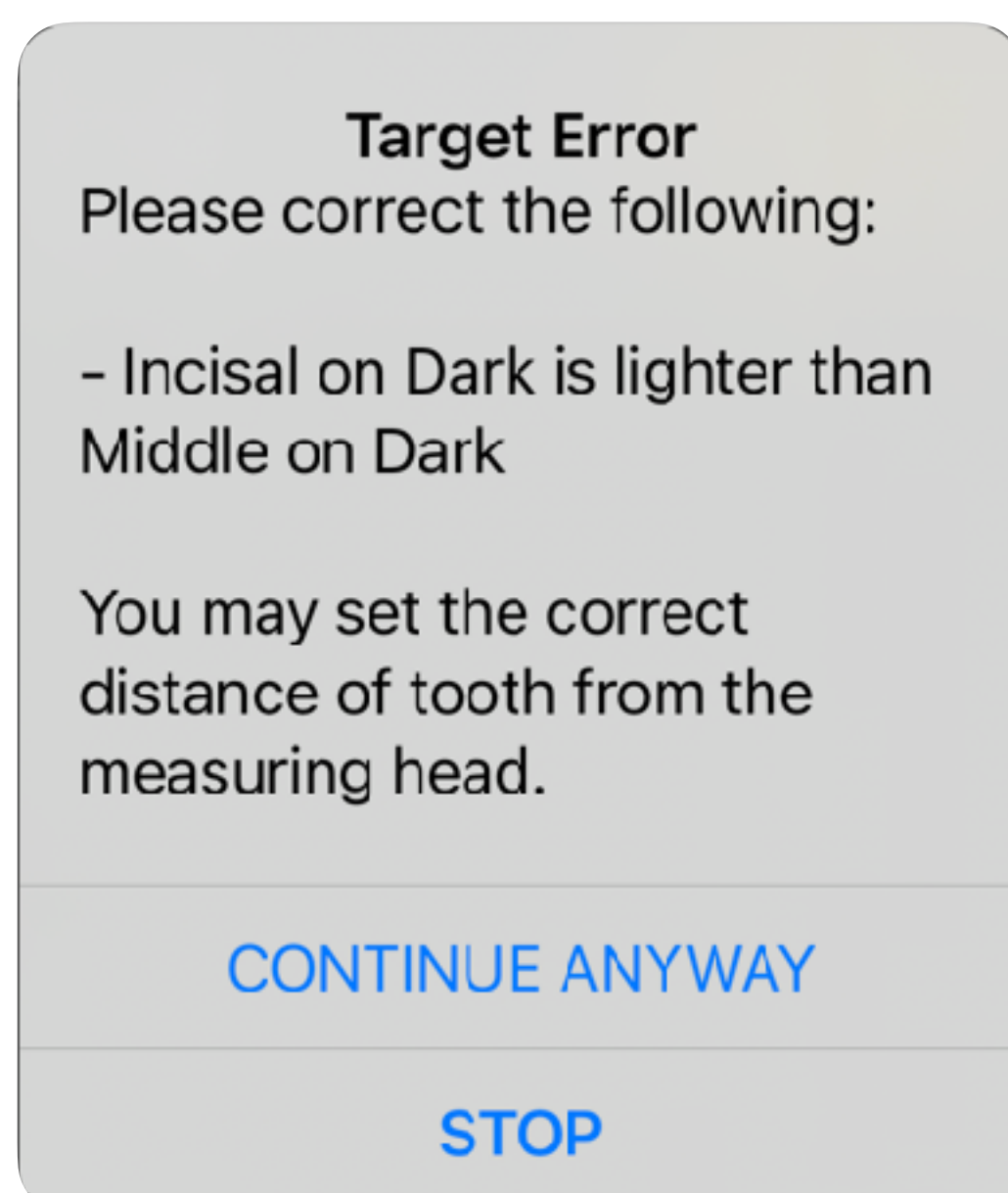


7- The “gear” symbol allows to set-up more precise values of the tooth position in case of distance discrepancies with the head of the cone. (check the next “Fixing a Target Error” section)



## Fixing a Target Error

A target error will occur when a non logical measurement is detected. For example a region of the tooth being whiter with the open mouth (dark background) than with the closed mouth (lighter background). CompoShade will prompt you to correct this by compensating the distances.



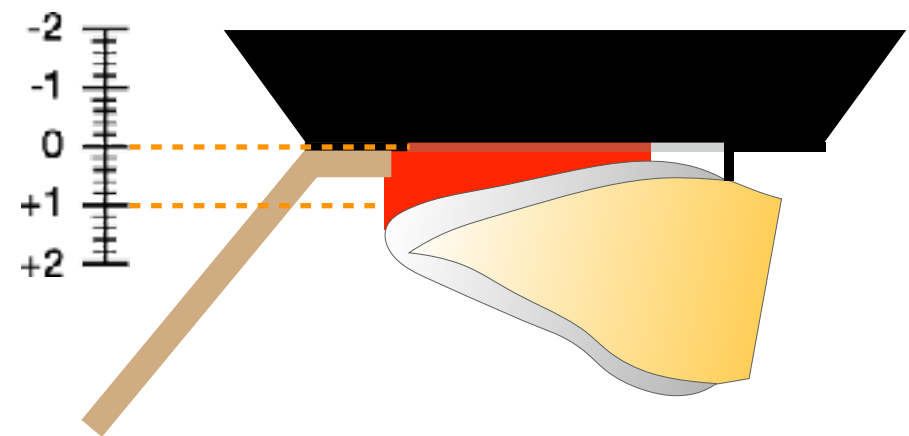


Distance from Head surface [mm]:

Middle Open	<input type="text" value="0.0"/>
Incisal Open	<input type="text" value="0.0"/>
Middle Closed	<input type="text" value="0.0"/>
Incisal Closed	<input type="text" value="0.0"/>

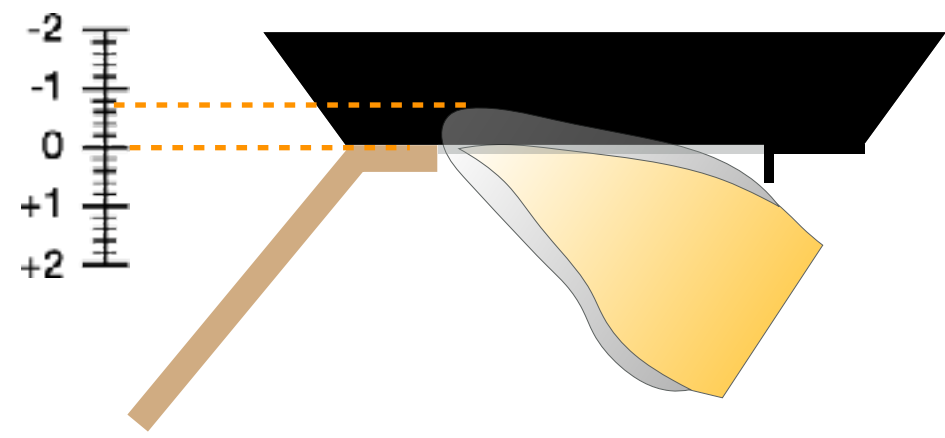
Distance from Head surface [mm]:

Middle Open	<input type="text" value="0.0"/>
Incisal Open	<input type="text" value="1.0"/>
Middle Closed	<input type="text" value="0.0"/>
Incisal Closed	<input type="text" value="0.0"/>



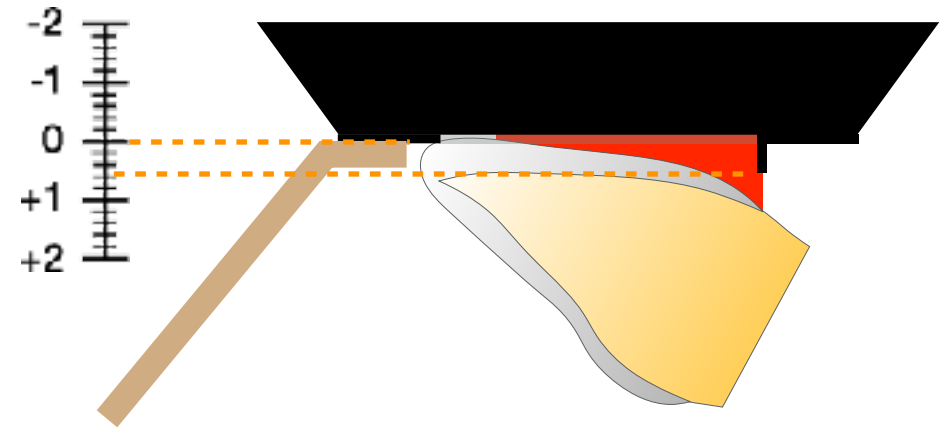
Distance from Head surface [mm]:

Middle Open	<input type="text" value="0.0"/>
Incisal Open	<input type="text" value="-0.7"/>
Middle Closed	<input type="text" value="0.0"/>
Incisal Closed	<input type="text" value="0.0"/>



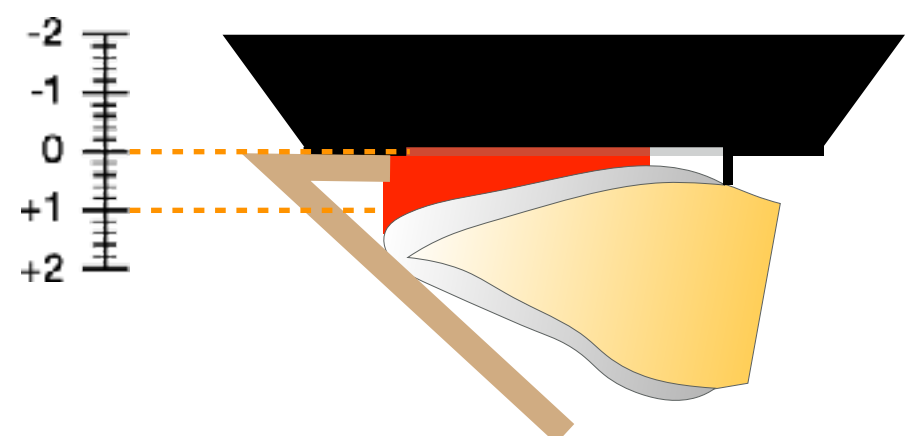
Distance from Head surface [mm]:

Middle Open	<input type="text" value="0.5"/>
Incisal Open	<input type="text" value="0.0"/>
Middle Closed	<input type="text" value="0.0"/>
Incisal Closed	<input type="text" value="0.0"/>



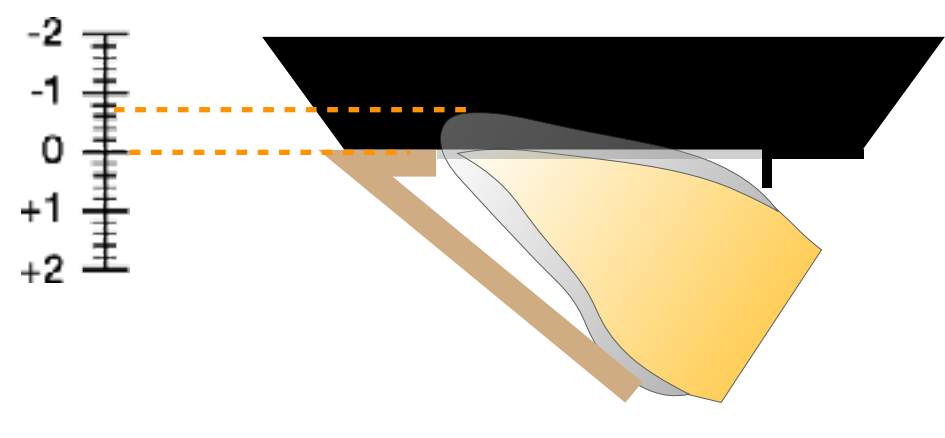
Distance from Head surface [mm]:

Middle Open	<input type="text" value="0.0"/>
Incisal Open	<input type="text" value="0.0"/>
Middle Closed	<input type="text" value="0.0"/>
Incisal Closed	<input type="text" value="1.0"/>



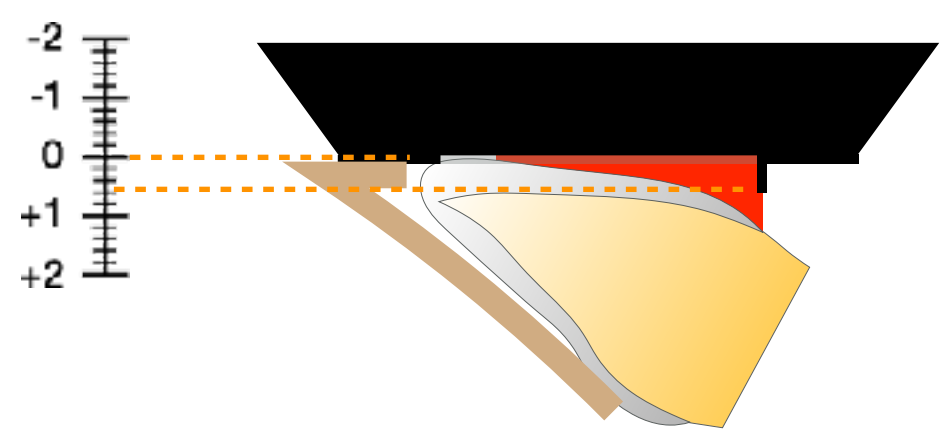
Distance from Head surface [mm]:

Middle Open	<input type="text" value="0.0"/>
Incisal Open	<input type="text" value="0.0"/>
Middle Closed	<input type="text" value="0.0"/>
Incisal Closed	<input type="text" value="-0.7"/>

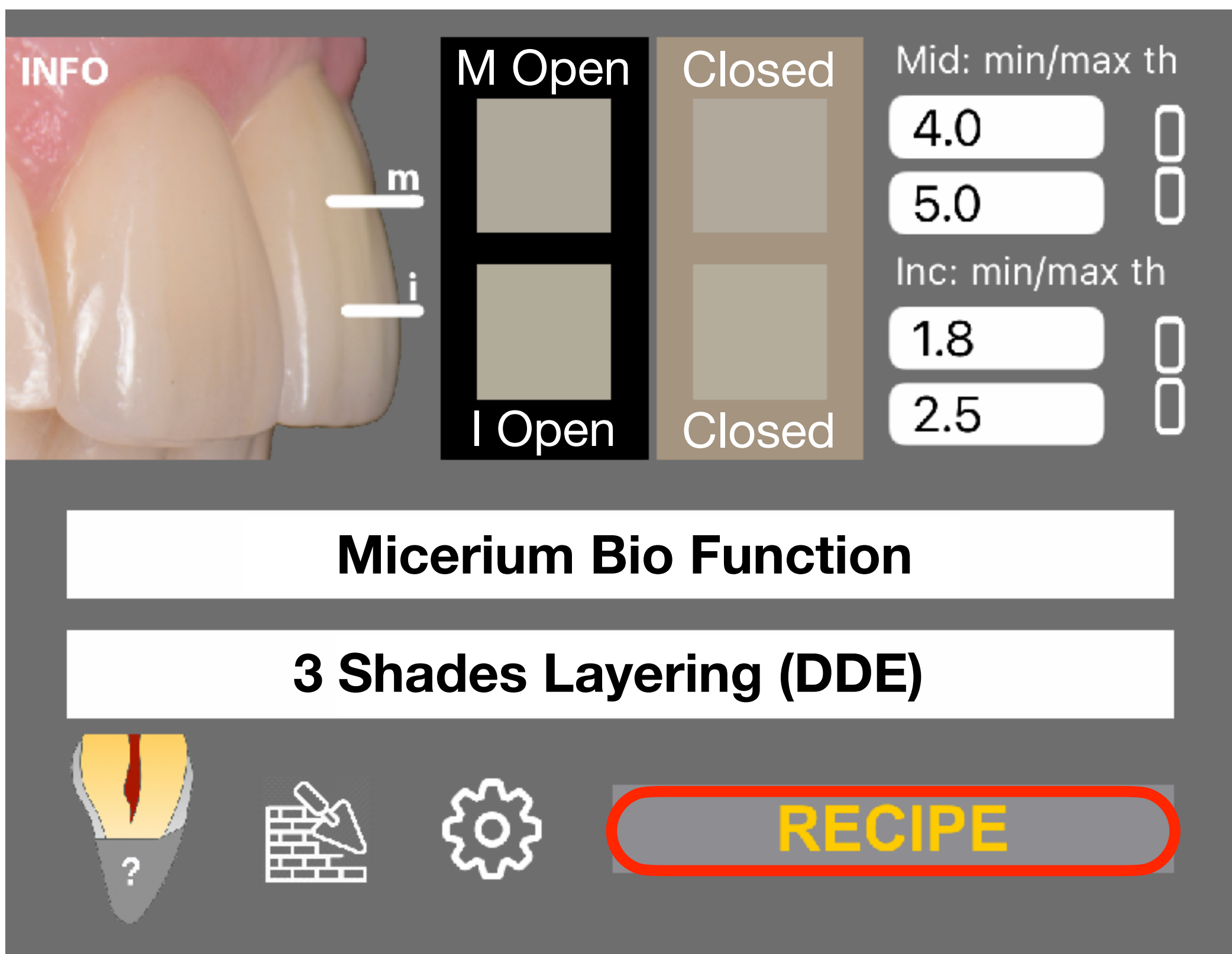


Distance from Head surface [mm]:

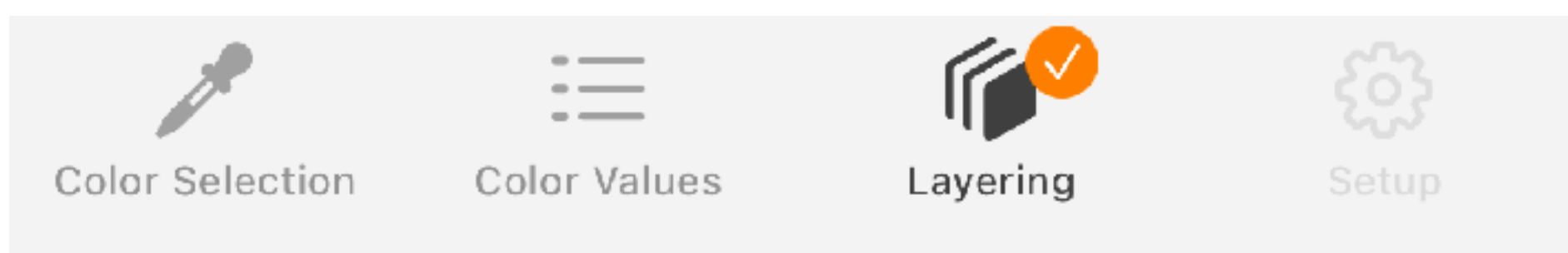
Middle Open	<input type="text" value="0.0"/>
Incisal Open	<input type="text" value="0.0"/>
Middle Closed	<input type="text" value="0.5"/>
Incisal Closed	<input type="text" value="0.0"/>



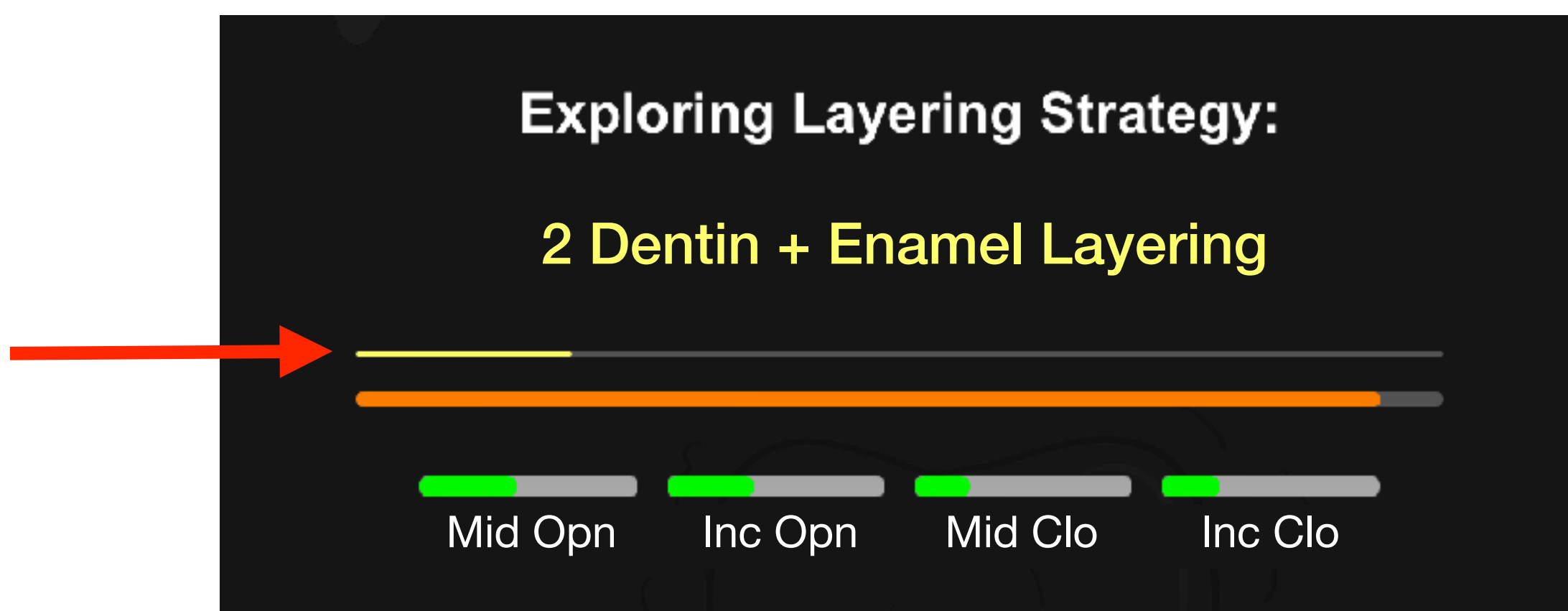
8- When all input data is ready, start the calculation of the layering recipes by clicking the button RECIPE



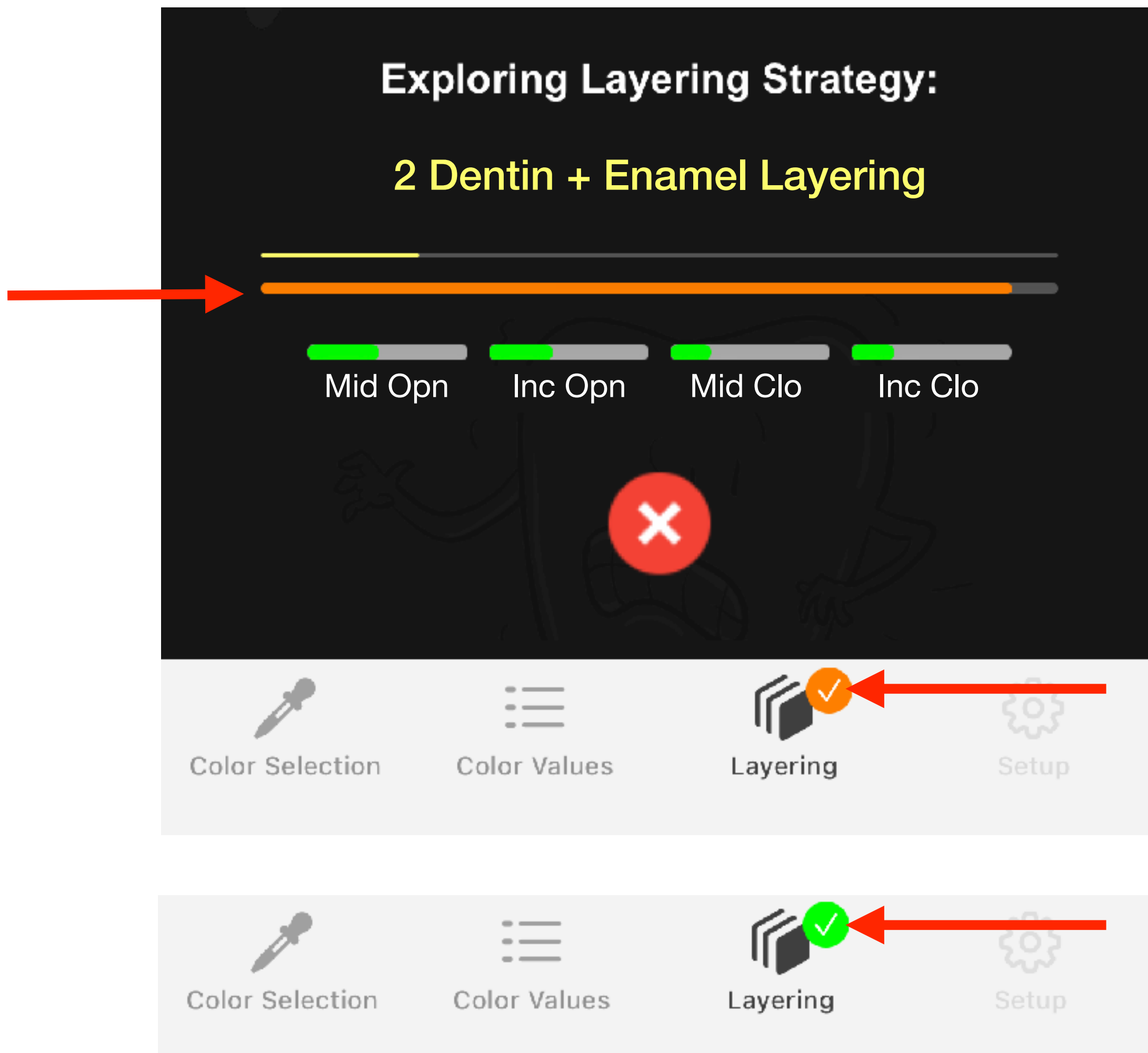
9- In the computing stage, the Set-up tools and other sections will be temporarily disabled, instead, information about the progress of the recipe calculations are displayed:



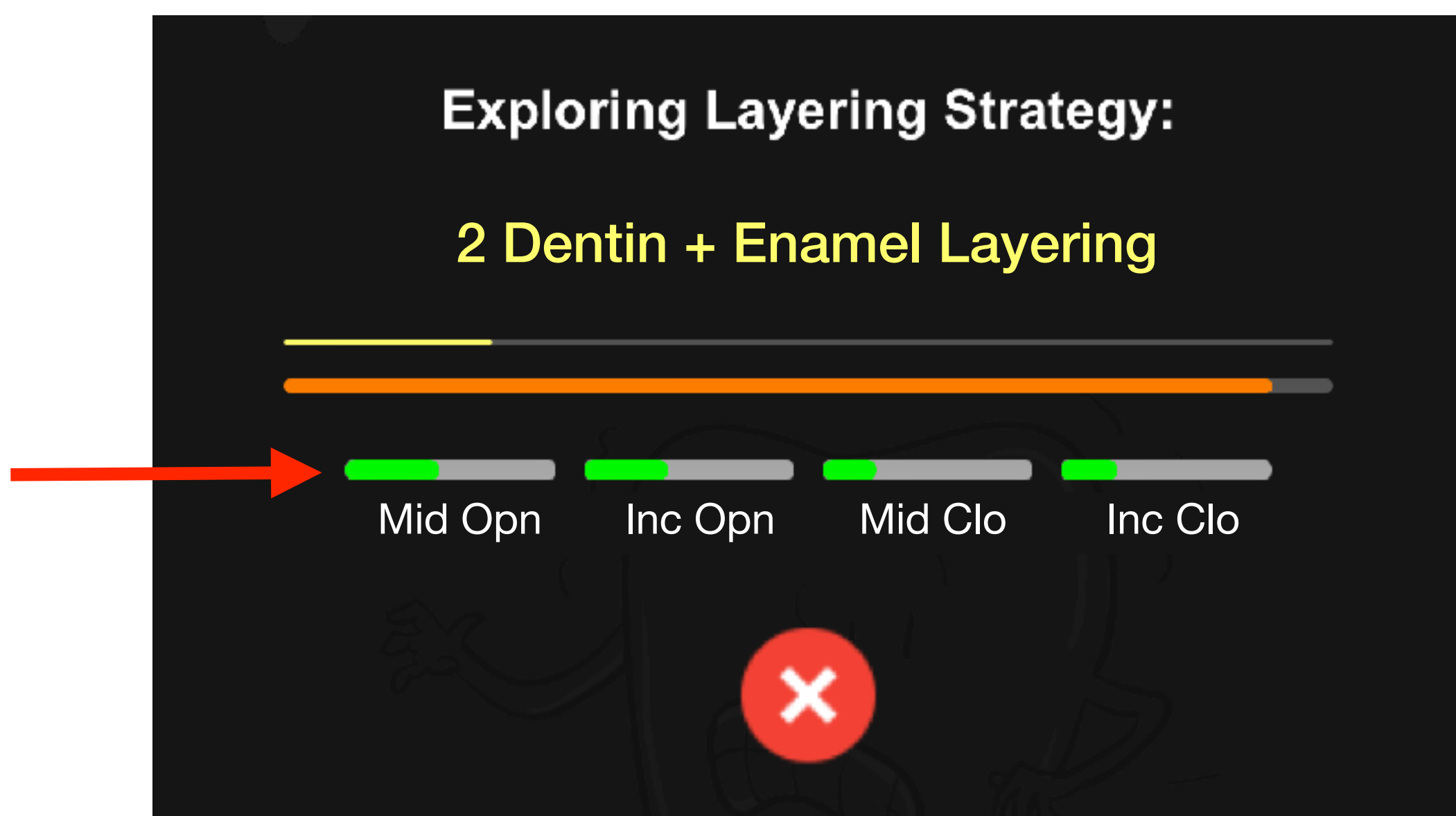
10- The yellow line indicates the progress on the total Layering strategies to be analyzed.



11- The thick line indicates the progress of the current Layering strategy by changing color according to the success in the already found recipes. If it is grey, it will not contain any successful match, if it is orange it will contain at least a recipe. This color is displayed as well in the LAYERING badge in the bottom of the screen. When the badge and the line become green, there is at least one recipe that fits all the requested areas.



12- The shorter elements on the bottom display the quality and amount of recipes found on each region (green means that at least one optimal recipe was found for that particular region).



13- When calculations are done, the software will display the recipes in order from best to worse (1).

Each region MIDDLE OPEN, INCISAL OPEN, MIDDLE CLOSED and INCISAL CLOSED are shown separately in order to evaluate the resulting colors (2).

The DE shows how precise the recipe is, the minimum DE will be achieved if each layer has the exact thickness and the maximum if the layers accumulate slight errors (3).

The layers are shown in order, the first one is the palatal and the last one is the buccal (4).

The colored numbers show how sensitive is the layer to a thickness error of +0.1 or -0.1, in other words, what will happen if a 0.4 layer is built to 0.5 or to 0.3. Green numbers indicate high tolerance to thickness errors, orange little tolerance to thickness error and red no tolerance.

The screenshot shows a software interface for recipe management. At the top, there is a 'recipe 1/3' label with a red circle '1' next to it. Below this are four buttons: 'Middle Open' (with a red circle '2'), 'Incisal Open', 'Middle Closed', and 'Incisal Closed'. Below the buttons, the text 'thickness: 4.3 mm' is displayed. To the right, 'DE: 0.4 - 2.8' is shown with a red circle '3'. Below this is a table with four rows of data, each with a red circle number (4, 5, 6) next to it. The table columns are: Layer ID, Layer Name, DE value, and Thickness. The DE values are color-coded: green for high tolerance, orange for little tolerance, and red for no tolerance.

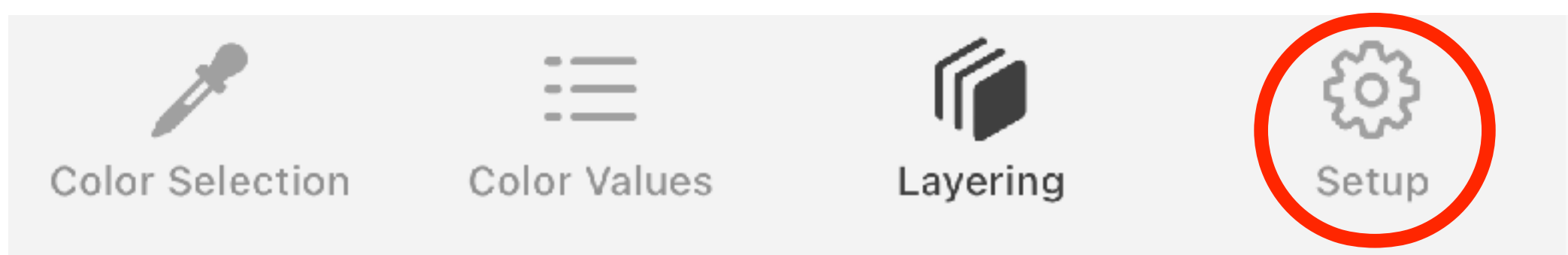
Layer ID	Layer Name	DE	Thickness
1	UE1	0.0DE	(0.3) 0.3 mm
2	UD6	0.0DE	(2.4) 2.7 mm
3	UD0	0.5DE	(1.2) 3.9 mm
4	UE1	2.0DE	(0.4) 4.3 mm

14- When clicking on the current RECIPE or on the COPY button, the recipe will be copied to the clipboard, and with a PASTE command can be inserted into a document, email or text message

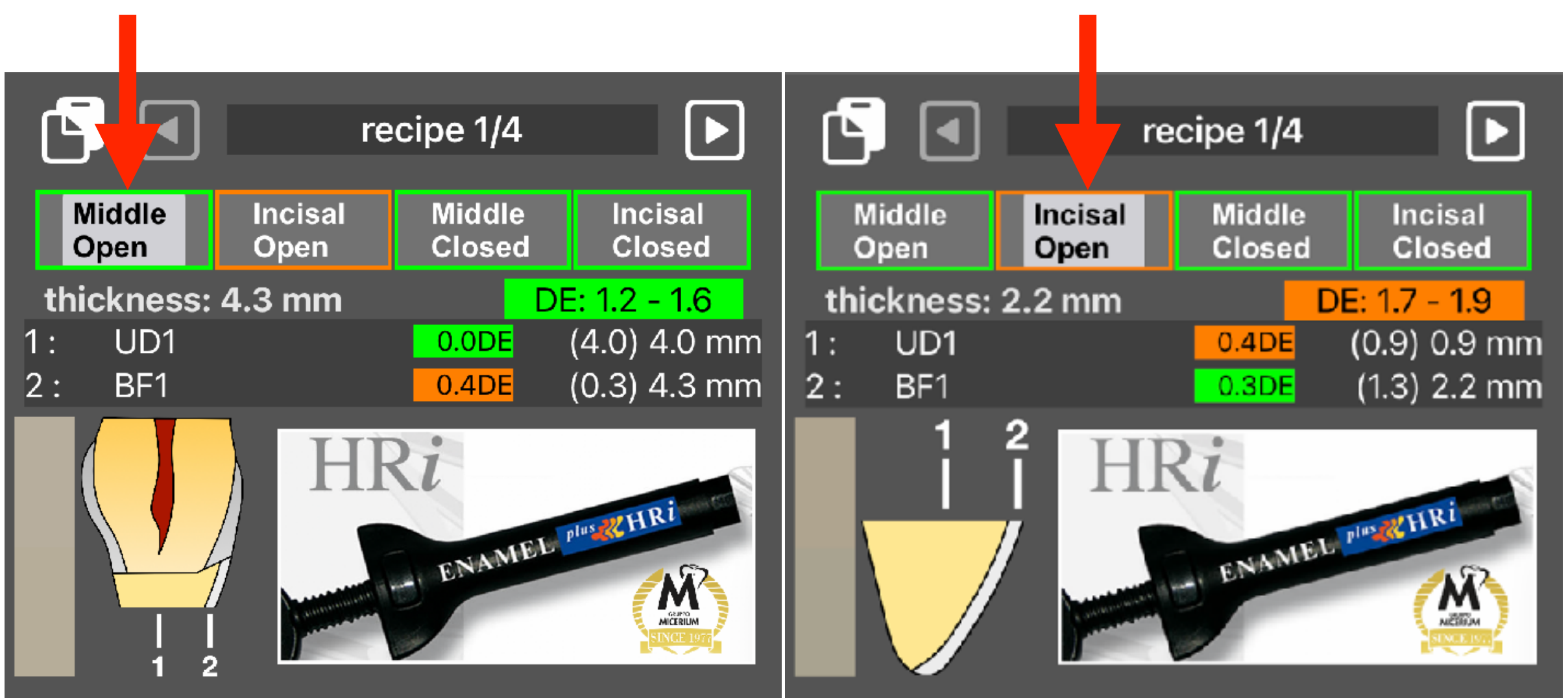
The screenshot shows a software interface for recipe management. At the top, there is a 'recipe 1/4' label. To the left of the label is a 'COPY' button (with a red circle around it) and a left arrow button. To the right is a right arrow button. Below the label are four buttons: 'Middle Open' (with a red circle around it), 'Incisal Open', 'Middle Closed', and 'Incisal Closed'. Below the buttons, the text 'thickness: 4.3 mm' is displayed. To the right, 'DE: 1.2 - 1.6' is shown. Below this is a table with two rows of data. The table columns are: Layer ID, Layer Name, DE value, and Thickness. The DE values are color-coded: green for high tolerance, orange for little tolerance, and red for no tolerance.

Layer ID	Layer Name	DE	Thickness
1	UD1	0.0DE	(4.0) 4.0 mm
2	BF1	0.4DE	(0.3) 4.3 mm

15- It is recommended to avoid using the expert settings unless you have knowledge or are assessed by an expert in this area.



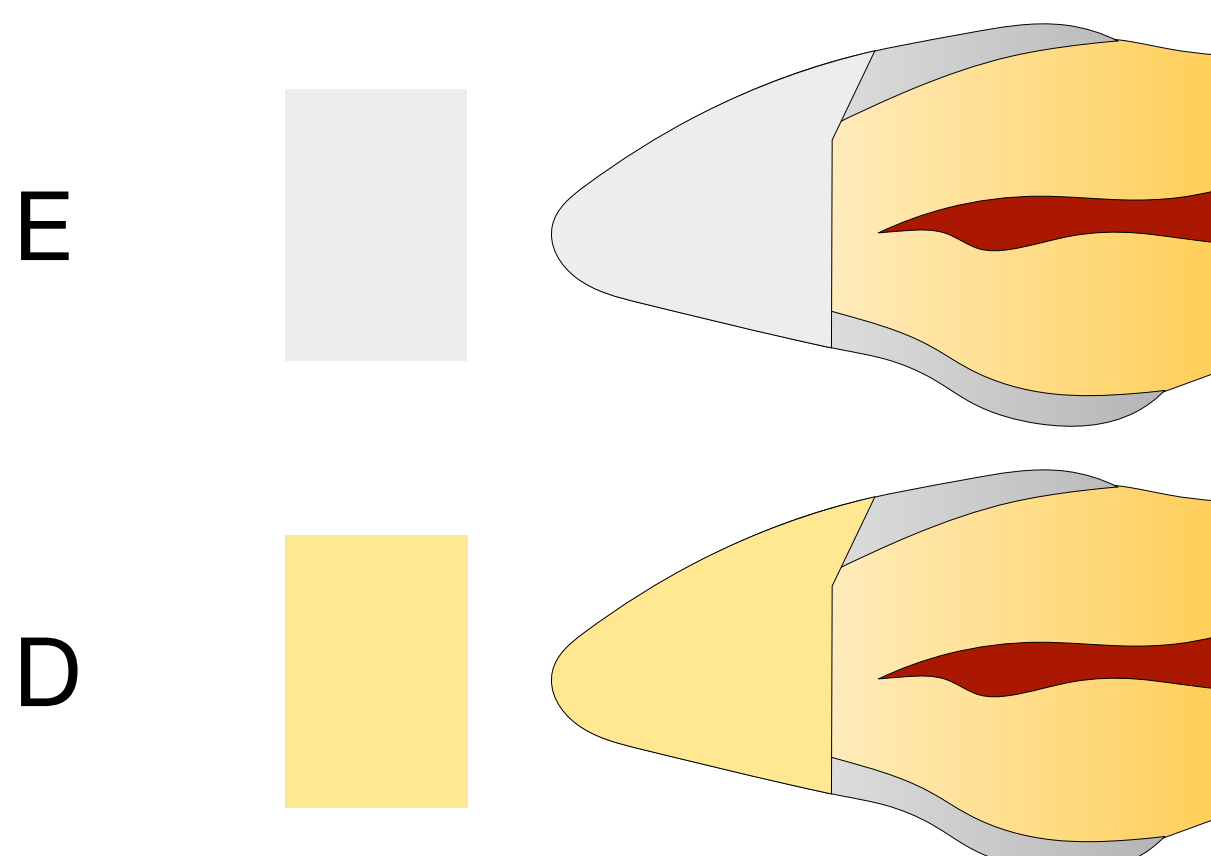
16- The recipes are obviously the same for the two versions of INCISAL and the two versions of MIDDLE, layering diagram will change



## Layering Strategies

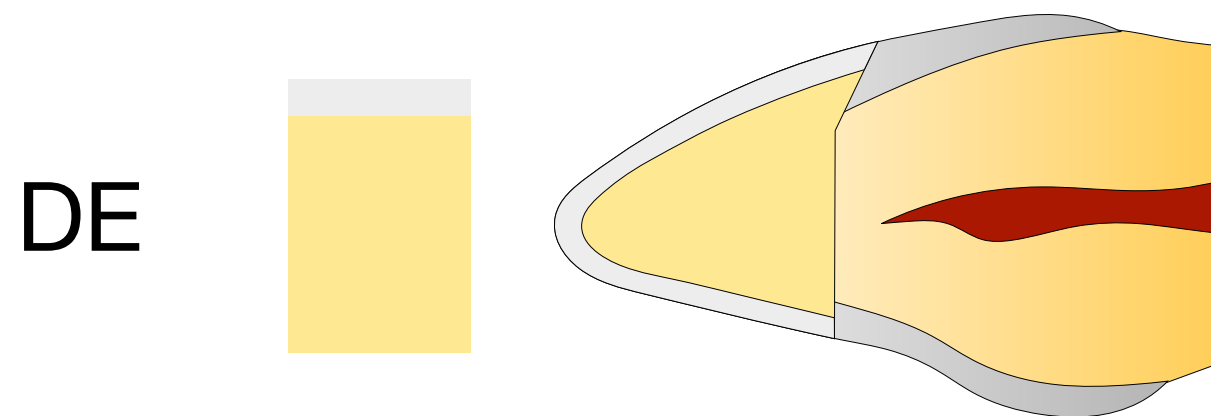
CompoShade has the following Layering strategies available. Select the technique that suits better your case or choose Optimized Layering.

1 Shade layering (D/E): Single shade strategy proposes only one shade of Enamel (E) or one shade of Dentin (D).

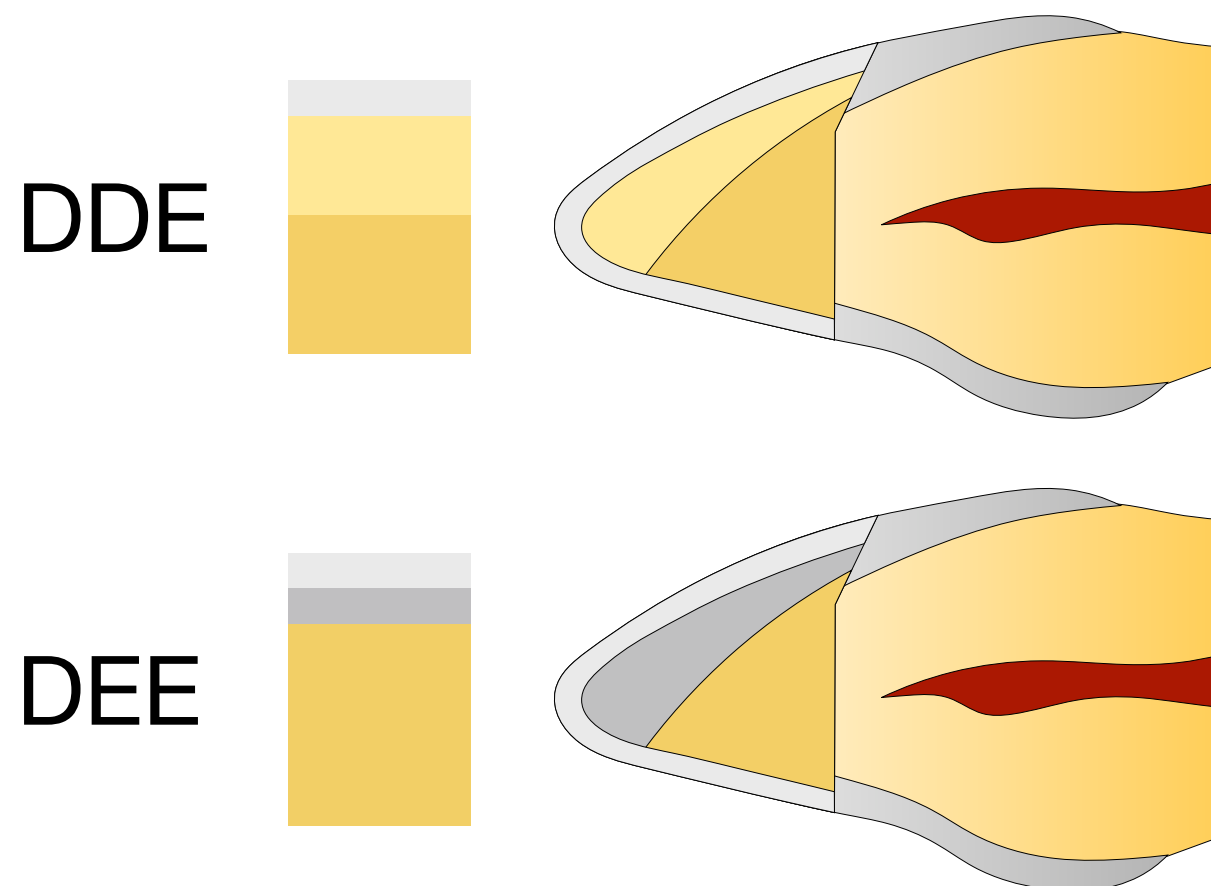




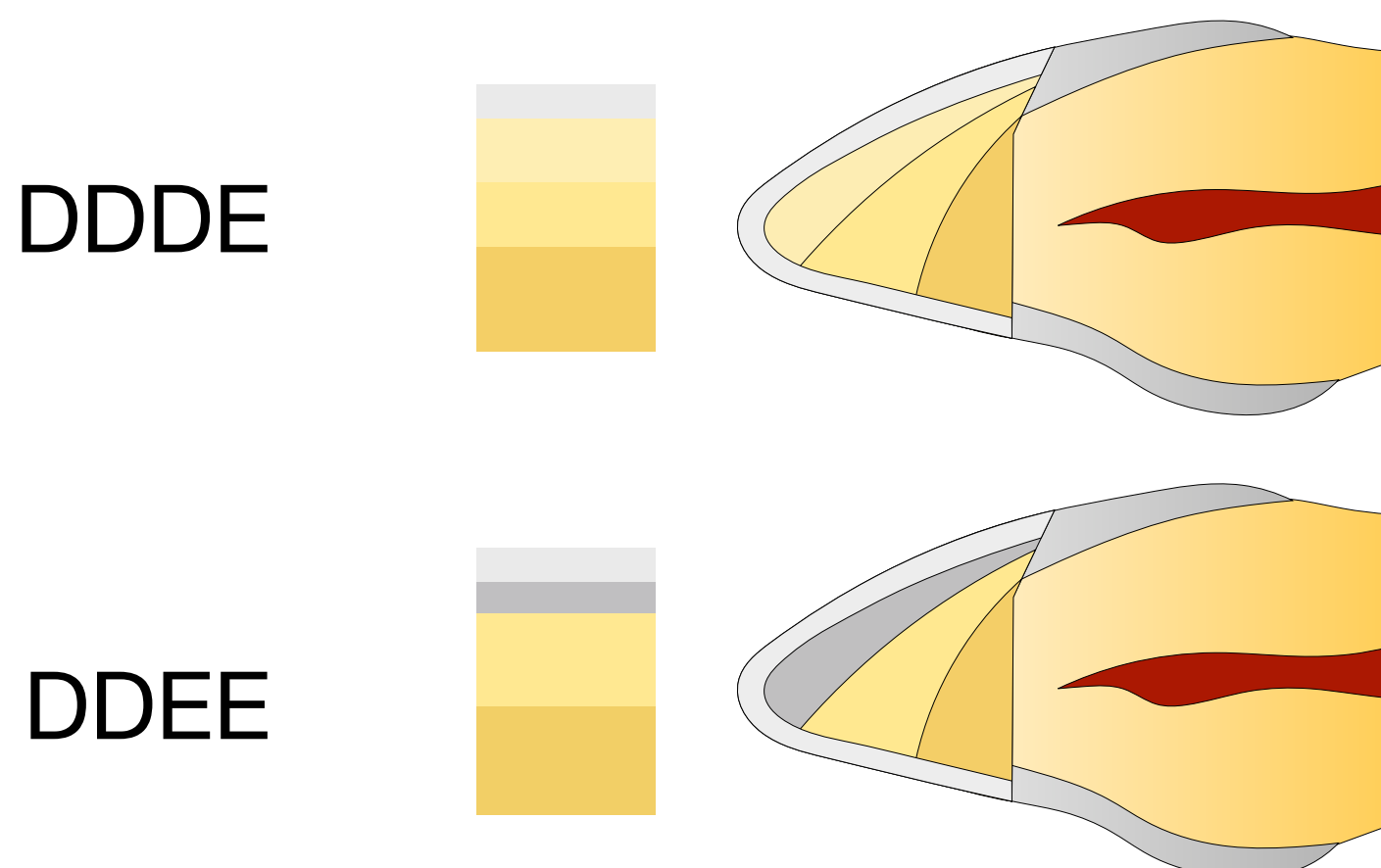
2 Shade Layering (DE): Layering with one Dentin + Enamel (DE)



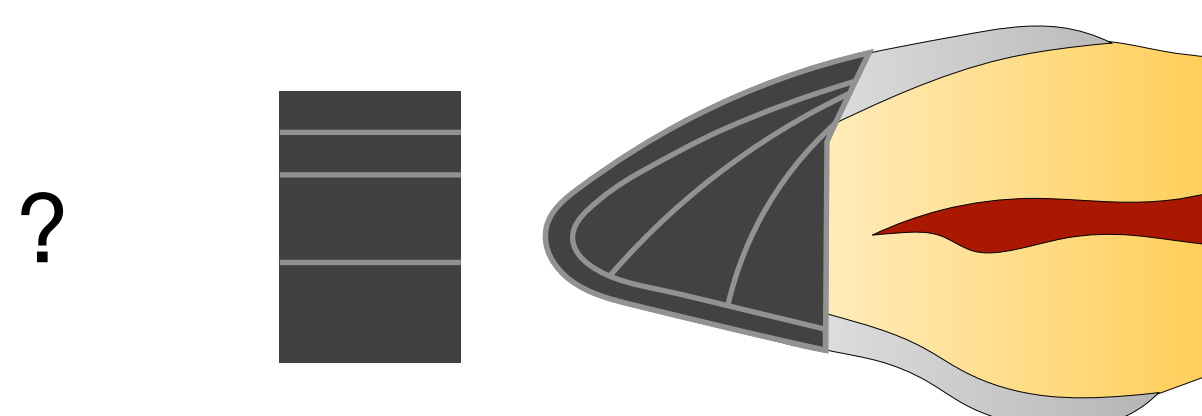
3 Shade layering (DDE/DDEE): proposes 2 layers of Dentin and one Layer of Enamel (DDE), if no recipe is found then the following combination will be examined (DDEE)



4 Shade layering (DDDE/DDEE): proposes 3 layers of Dentin and one Layer (DDDE) of Enamel, if no recipe is found then the following combination will be examined (DDEE)



Optimized layering: will propose the simplest layering strategy among all possible strategies with the best correspondence to the Good Match in the expert user settings.

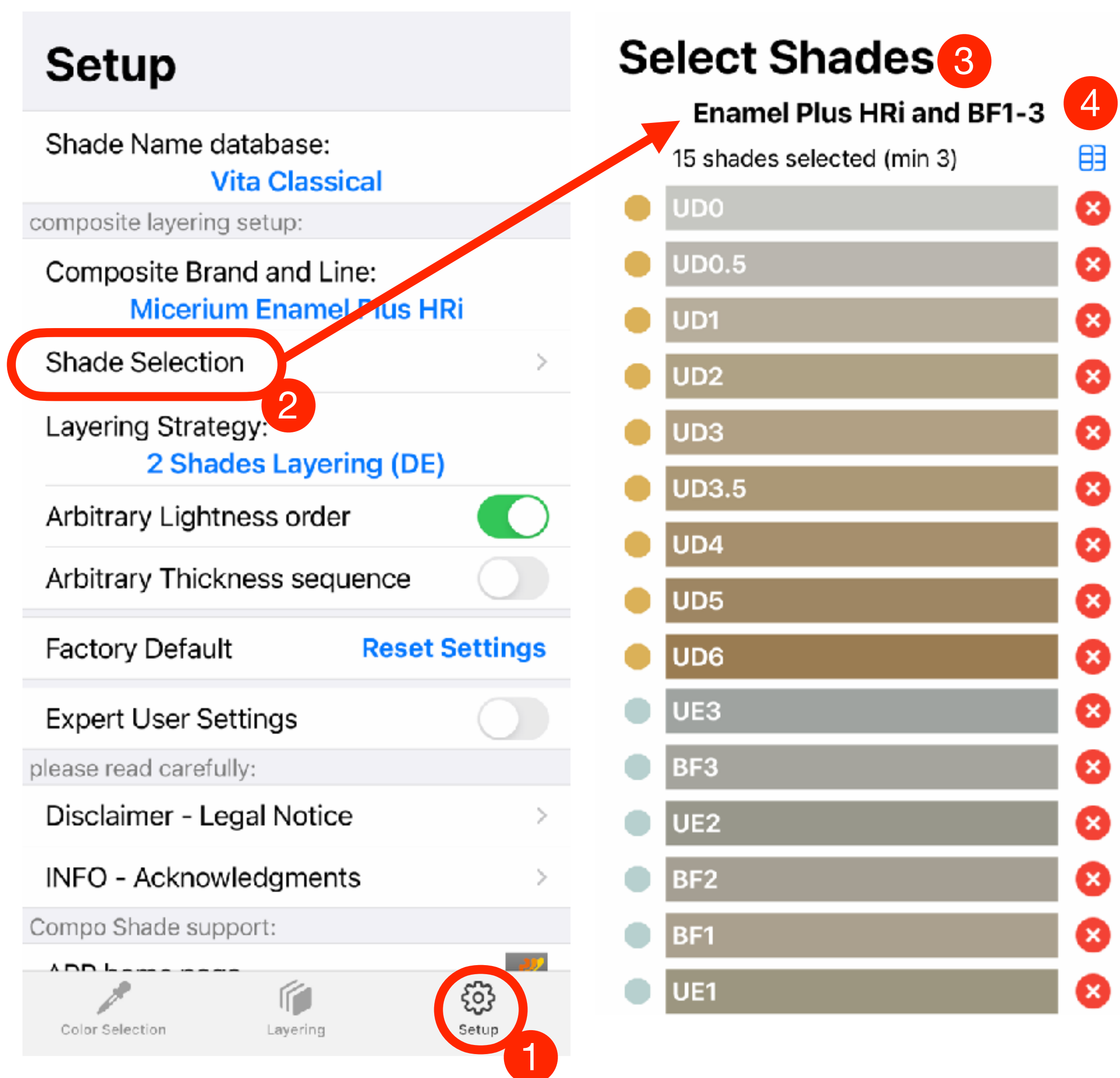



# Shade Line-up

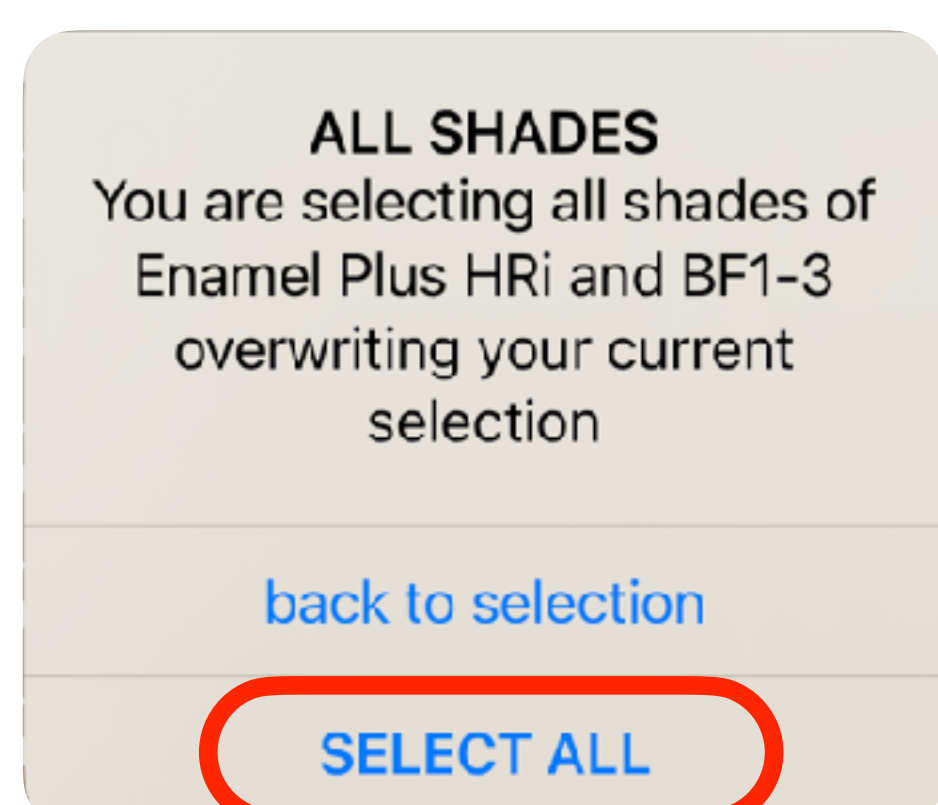
It is possible to customize the CompoShade system with the masses you have available and/or remove any unnecessary shades. If you have a commercial kit, select it and the system will automatically select the appropriate masses. “Enamel Plus HRi and BF1-3” contains the broader shade selection from all the kits.

Here's how:

- 1- Go to Settings
- 2- Navigate to Shade Selection
- 3- Remove any unwanted shades by clicking on the corresponding crosses.

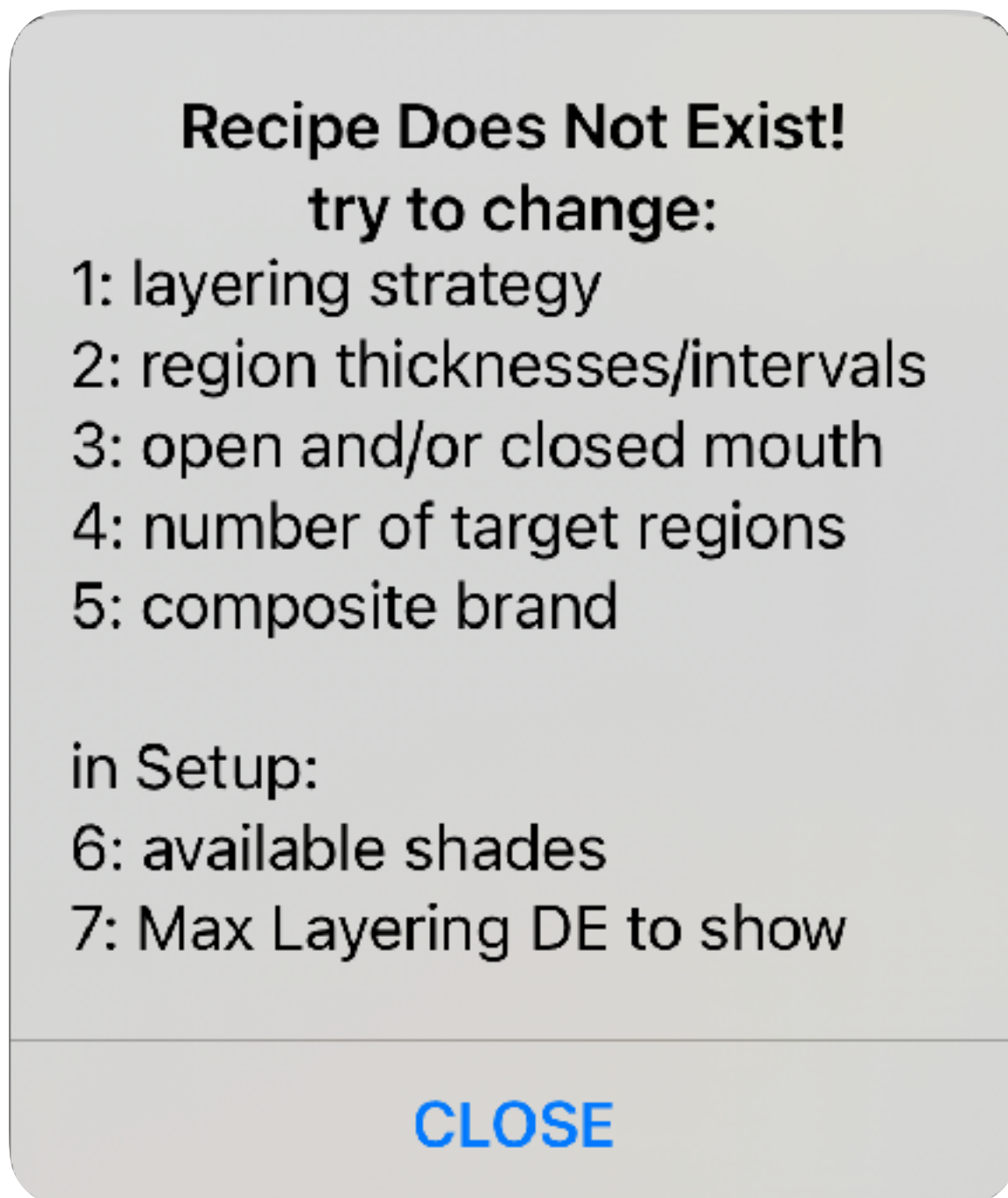


4- Click on the grid  to reset the composite selection. **SELECT ALL** to reset all colors back.

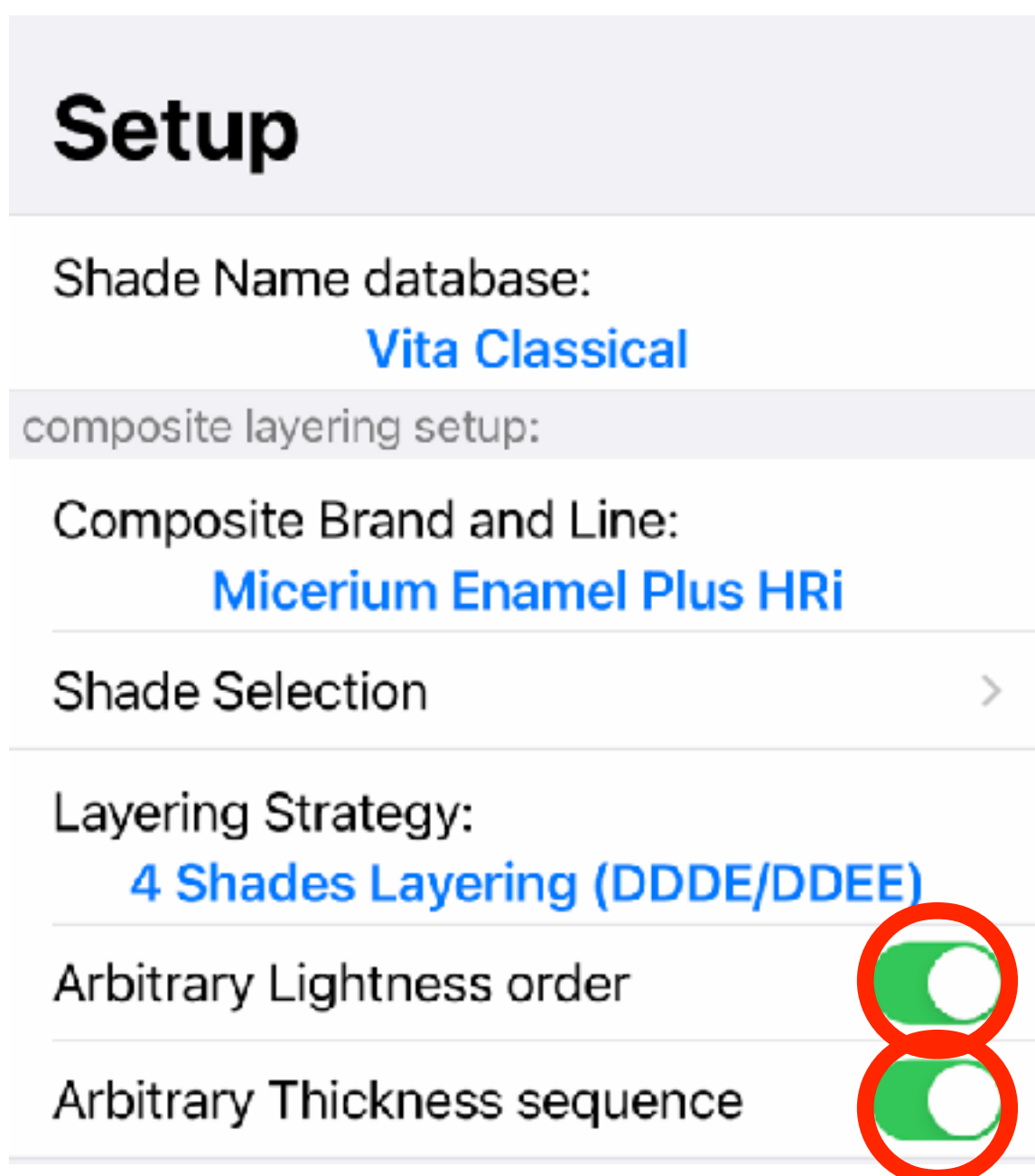


# if Recipe Does Not Exist

When it is not possible to find a layering recipe, please review the parameters described in the warning dialogue.



Follow the 7 parameters to change or improve.



These parameters will allow the app to propose with different arrangement and disposition than classic order arrangement (lighter colors on the bottom layers and variable thickness)

Some times, the fact of not having a recipe is a very valuable information!