

**THREE SHADE GUIDES HIGHLY RECOMMENDED:**

- The first guide should have the tabs arranged according to brightness in this order: (high value) B1,A1,B2,D2,A2,C1,C2 (medium value) D3,A3,D4,B3,A3.5 (low value) B4,C3,A4,C4.
- The second guide should be arranged in color groups in this order: (Brownish) A1,A2,A3,A3.5,A4 (Yellowish) B1,B2,B3,B4 (Grayish) C1,C2,C3,C4 (Reddish) D2,D3,D4.
- The third guide should also be arranged in color groups A B C D. On this guide you will need to grind off the necks of the tabs because sometimes the heavy extrinsic coloring on the tab can distract your shade selection. If you select a shade using a tab with no neck, you need to list this on your Rx for the laboratory. Ex.(A4 no neck)

**TERMINOLOGY OF COLOR:**

Hue (color): The description or name of a color (brown, yellow, gray, or red.)

Value (lightness/darkness): Refers to the brightness of a color related to a scale from white to black. High value is bright (white) and low value is gray or dark.

Chroma (saturation): The intensity or strength of a given hue (color)

**ALWAYS DO THE FOLLOWING:**

Have the patient remove lipstick or bright make-up if any.

If the patient is wearing bright colored clothing, it is a good idea to drape the patient with a neutral colored (gray) cover-up or bib.

Make the shade selection at the beginning of the appointment before the clinician's eyes become fatigued from the dental procedures.

For a good reference point, use the canines in selecting a shade because they have the highest chroma of the dominant hue of the teeth.

First impressions are the most accurate in shade selection.

When making shade selections it is important not to view the comparison for more than 5 seconds at a time to avoid fatiguing the cones of the retina. It is recommended to gaze at a neutral gray cover-up or the neutral gray color on the back of the Shade Wand reflector between each 5-second shade evaluation.

Compare your shade selection under varying shade conditions such as wet versus dry, lip retracted versus lip down, and move the light at different angles. Remember that nature has given us some guidelines to be aware of in shade selection. For example, upper centrals, laterals, and bicuspids usually have similar chroma. Upper cuspids are usually one to two chroma levels higher than upper centrals and laterals.

**PROCEDURE A:**

Always select the value reading first. This is the most important dimension in matching a ceramic restoration. By using guide #1 with the tabs arranged in order of brightness, place shade tabs on the same plane as the tooth you are trying to match. Start off with the Shade Wand at the patient's mouth and move the shade guide across that plane until the right value is selected. Recheck the value selection by placing the Shade Wand at the patient's mouth and then slowly move the light away. If there is no difference seen between the tooth and the tab, the value reading will be matched. Ex. Take a C2 and a C3 and hold together. Take the Shade Wand and hold it very close to the tabs, then slowly move the light away and notice that the C2 tab will look brighter.

Now that the value reading has been taken, use guide #2 arranged in group order to select the color reading. This should be easier because the range has already been narrowed by the value selection. Rapidly scan the shades in that range and by the process of elimination determine which tab matches the closest. If you have made a selection between two tabs, use guide #3 with no necks to aid in selecting the closest color match.

It is recommended to place the Shade Wand 8-12 inches away from the patient's mouth. An easy way to determine if the light is at proper distance is to place the light at the patient's mouth, then slowly move the light away until detail can be seen in the teeth, especially at the incisal edge. This is important because if the light is too close, the teeth become washed out and lose all detail.

**TRYING TO SELECT A VALUE READING FIRST IS DIFFICULT FOR SOME CLINICIANS. IF SO, USE THE FOLLOWING PROCEDURE.**

**PROCEDURE B.**

Let's say we are going to select a shade for an upper central. First select the color of the patient's canine. Either brown, yellow, gray, or red. Let's say you selected yellow.

You would then take all the B shade tabs and select which Chroma number it more closely matches (B1,B2,B3,B4). Let's say you select B4 as the matching Chroma for the canine. Because we know that upper centrals are usually one to two chroma levels lower than for the patient's central. cuspids, we could say that B2 or B3 is the correct shade for the patient's central. Let's say B2 is the closest match.

Because our eyes play tricks on us at times, we need to check ourselves. To do this, take the shade you selected which was a B2 and also take all the other (#2) shade tabs (A2,C2,D2). Individually check by squinting your eyes to verify which is the closest color match to the central. Most of the time, your first selection B2 would remain the best choice. But at times you will change to one of the other groups which may more closely match the patient's tooth because of the Value or brightness which is the most important part of the shade selection.

Yours For Better Dentistry,



Robert P. Marbach, BA, CDT  
President