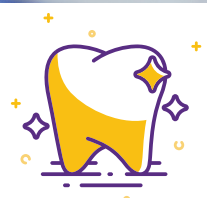




SHADE MATCHING

A Step by Step Guide

Step 1 Determine The Tooth Shade



Shade determination should be made at the start of the appointment!



View patient at eye level and make a decision as quick as possible

Use A Shade Selection Guide
(We Recommend One of These)

- Vita
- Vita 3-D
- Chromoscop
- Bleached Shade Guides
- e.Max Shade Guide

Step 2 Create A Neutral Environment

A Patient's Lipstick, Clothing, And Clinical Drape Also Can Adversely Affect Color Perception.

A

Use A Blue Bib To Relax Your Eyes

Stare At A Bib Or A Neutral Wall For A Short While.

B

Patient's Teeth Should Be Clean.

Have Patient Remove Lipstick And Brush Teeth

C

Remove All Bright Colors

No Bright Colors In The Immediate Field Of View

D

Wear Neutral-Colored Gloves

This Helps Improve Match Accuracy

E

Subdued Wall Color If Possible

Preferably Greyish To Slate Blue

THE ENTIRE ROOM OR SETTING SHOULD HAVE A NEUTRAL LIGHT GRAY BACKGROUND... NOT WHITE

Step 3 Lighting Sources

One of the most overlooked areas in shade matching is the light source and, specifically, conflicts caused by indirect lighting sources. It is critical that the main light source being used to illuminate the teeth is a full-spectrum source.

The light source will dramatically affect shade matching accuracy.

THE OPERATORY LIGHT SHOULD NOT BE POINTED DIRECTLY AT THE PATIENT.

IDEAL LIGHTING CONDITIONS



5500k (Daylight)

Indirect lighting with fluorescent bulbs at 5500 Kelvin color temperature.



CRI of 90+ (Color Rendering Index)

The higher the CRI number, the better it will be for shade matching.



Consistent (Light Quality)

Light does not change depending on the time of day or location.

If putting in more lighting or modifying operatories for proper light intensity is not possible, there are some handheld sources of light that can be a good adjunct to existing lighting and are not too expensive.

The Rite-lite™ (AdDent, Inc., www.addent.com) is a 5,500K handheld LED light that can provide a good source of light for those who cannot adjust their lighting environment. It gives the practitioner a full-spectrum light source in the palm of their hands

Step 4 Use Photos

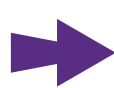
IMPORTANT

Photographs are not accurate or sufficient in color replication, but they can be useful for determining gradation & characterization.

For Best Results, Follow These Steps

1

Always have a shade tab in the photo so the technician can compare the difference in the Value and Chroma and make the needed adjustments.



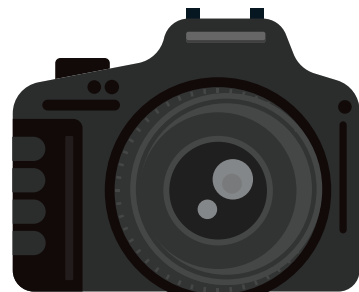
2

Use a camera with a macro lens and ring flash. This will allow you to get a closer and more detailed photo without having the flash alter the shade.



3

If your camera doesn't have a ring flash, have the patient sit up with their chin slightly tucked in. This will help keep the flash from reflecting in the picture.



Use a room with some natural light if possible and avoid pointing any light directly toward the patient.

It is essential that color selection is done when the patient is first seated in the dental chair as Chroma and Value can change due to minor dehydration.

CHROMA The Purity Of A Color

High chroma colors look rich and full. Low chroma colors look dull and grayish. Sometimes chroma is called saturation.

VALUE Lightness Or Darkness Of The Hue

Value varies vertically along the color solid, from black (0) at the bottom, to white (10) at the top. Neutral grays lie along the vertical axis between black and white.

Step 5 Color Perception

Color perception varies from fractionally to drastically by individual depending on their vision.



*This diagram shows color wheels as they might be perceived by people with different types of color blindness.

Doctors and technicians should take a color vision deficiency test such as Ishihara or Farnworth Lantern annually as vision can change.

If you have any questions or issues, Please feel free to contact the lab. WE'RE HERE TO HELP.