
Color Contrast Checker

Color contrast ratio measures the relative brightness between the text color and the background color. An appropriate color contrast between the text and background ensures that all individuals can easily read the text on the page or screen.

Color contrasts range from 1:1 (no contrast – white text on a white background) to 21:1 (maximum contrast – black text on a white background). A contrast ratio of at least 4.5:1 is required to meet digital accessibility requirements for normal-size text (font size less than 18pt). A contrast ratio of at least 3:1 is required to meet digital accessibility requirements for large text (18pt font size or larger, 14pt bold or larger).

To determine if the text/background color combinations used in the document or slide deck meet this contrast threshold, use a [color contrast checker](#).

Hex Codes

A color contrast checker requires the hex codes for the text and background colors. A hex code is a unique 6-digit alphanumeric code assigned to a color in the color spectrum. Two common hex codes are #ffffff (white) and #000000 (black).

The MDE [Brand Guidelines](#) list the hex codes for the approved primary and secondary MDE colors, as well as their tints and shades.

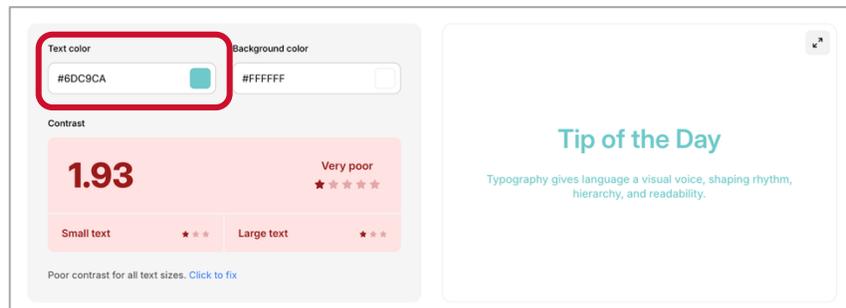


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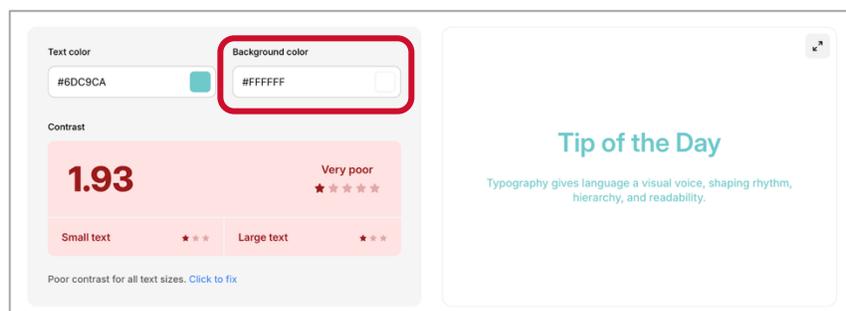
Once the hex codes for the text and background are determined, they must be evaluated for their color contrast ratio to ensure accessibility compliance.

Step 1: Open the free [color accessibility checker tool](#) from Colors.co.

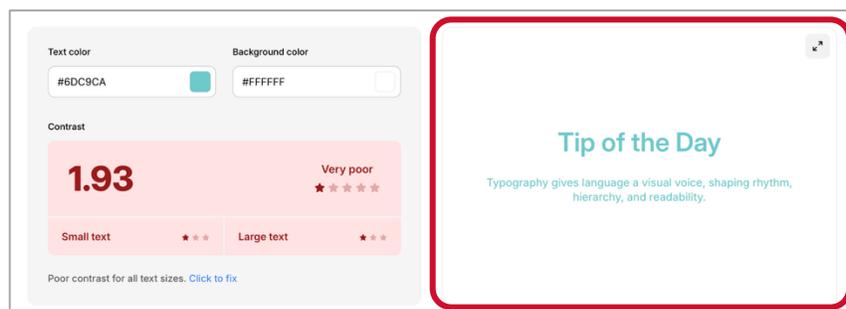
Step 2: Type (or copy and paste) the hex code of the text color.



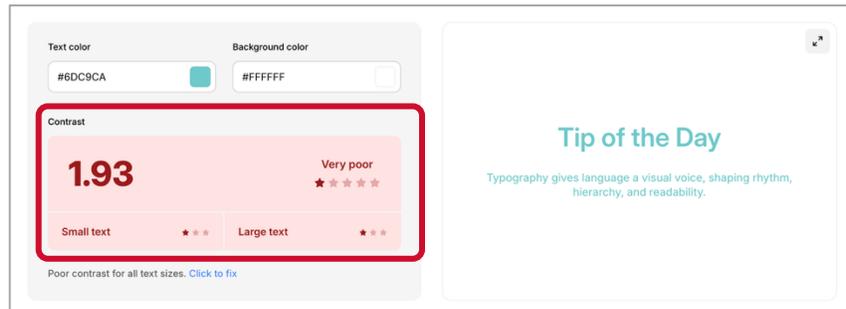
Step 3: Type (or copy and paste) the hex code of the background color.



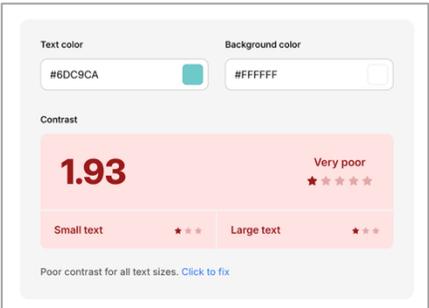
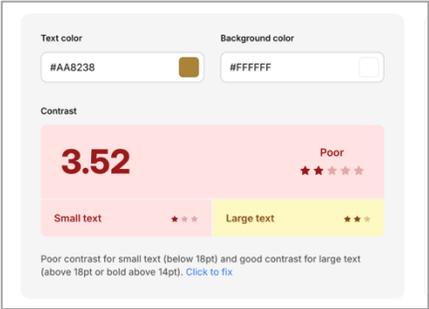
An example of the provided text and background color combination will be provided on the right side of the screen.

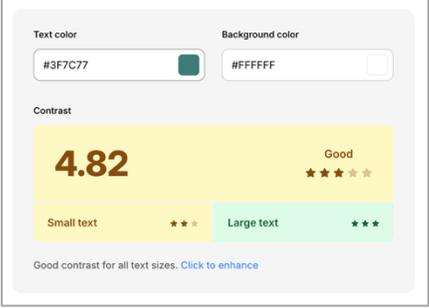
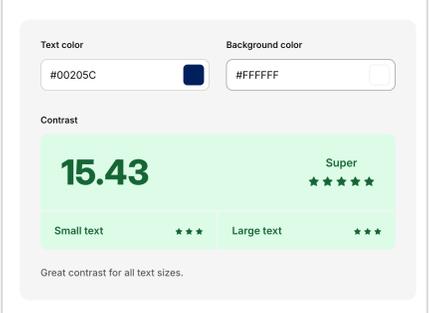


Step 4: Review the calculated contrast ratio to determine if it meets the required 4.5:1 threshold for normal text or 3:1 for large text. (Note: The resulting contrast will not be displayed as a ratio (i.e., 4.5:1). Instead, the first portion of the ratio – the measure of the lighter color – will be displayed. The value must be 4.5 or higher for normal text or 3 for large text.)



The color contrast checker will provide the contrast value, a rating from Very Poor to Super, and the contrast rating for normal text (less than 18 pt) or large text (greater than 18 pt or 14 pt bold or larger). Below are some examples of possible contrast results and their explanations.

Color Contrast Rating	Explanation
	<p>Text/background combination is Very Poor and should not be used for normal text or large text.</p> <p>Use the “Click to fix” link to have the tool recommend a color that scores Super in both text sizes.</p>
	<p>Text/background combination is Very Poor and should not be used for normal text.</p> <p>Text/background combination is Good for large text and could be used. However, the contrast could be improved.</p> <p>Use the “Click to fix” link to have the tool recommend a color that scores Super in both text sizes.</p>

Color Contrast Rating	Explanation
	<p>Text/background combination is Good for normal text and could be used. However, the contrast could be improved.</p> <p>Text/background combination is Super for large text and should be used.</p> <p>Use the “Click to enhance” link to have the tool recommend a color that scores Super in both text sizes.</p>
	<p>Text/background combination is Super for both normal text and large text and should be used.</p>

Step 4: Adjust the hex codes for text and background colors as needed until a compliant contrast ratio is reached. Add these hex codes to the text or fill color options in the desired application (e.g., Word, PowerPoint, Canva) to ensure the appropriate colors are used.

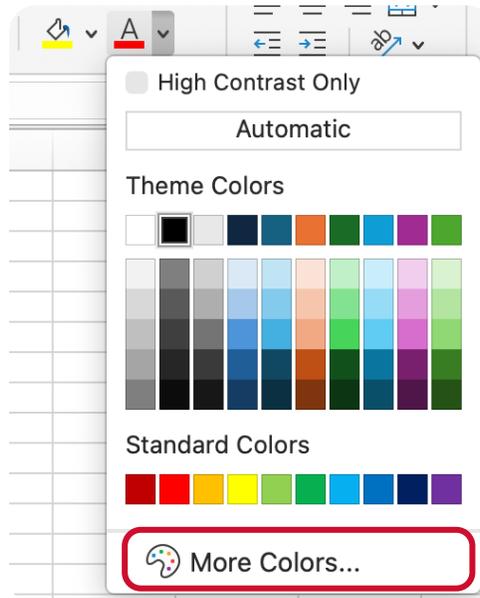
Add Hex Codes for Text and Fill Colors

Add MDE-approved or color contrast-verified colors in Word, Excel, or PowerPoint.

Step 1: Click on the **Font Color** or **Fill Color** menu to view the document theme colors.



Step 2: Click **"More Colors"**.



Step 3: In the colors window, enter the **Hex Color #**. Click **OK**.

