



## Color and Contrast Guidelines for Excel

Appropriate colors and contrast are necessary for people to see words. This is particularly true for people who are colorblind or have other visual disabilities. Contrast is the difference in luminosity (light value) between the text and the background. Good contrast allows more people to read what is written. Different colors are used to draw attention to different parts of a document, but some people perceive colors differently from others and some people do not see color differences at all.

### Sufficient Contrast

When there is not enough contrast between the color of the text (also called the foreground) and the color of the background, it can be difficult to visually distinguish between the text and background.

For those who are color blind, certain colors (such as red and green) can appear indistinguishable from each other. In such cases, text without enough contrast can be unreadable.

To ensure that information is perceivable, [Web Content Accessibility Guidelines \(WCAG\) 2.2 Level AA](#) requires that the contrast ratio (the degree of difference between a foreground color and background color) is:

- At least 4.5:1 for “regular” sized text which is 14 points, not bolded, and smaller.
- 3:1 for large text:
  - ▶ Bold text if it is 14 points or larger.
  - ▶ If it is 18 points or larger.

## Bad Example:

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Foreground colour  
HEX #0070C0

Background colour (black)  
HEX #000000

Sample preview  
example text showing contrast

WCAG 2.1 results  
Contrast ratio 4.1:1

- ▶ 1.4.3 Contrast (Minimum) (AA)
  - ✗ Fail (regular text)
  - ✓ Pass (large text)
- ▶ 1.4.6 Contrast (Enhanced) (AAA)
  - ✗ Fail (regular text)
  - ✗ Fail (large text)
- ▶ 1.4.11 Non-text Contrast (AA)
  - ✓ Pass (UI components and graphical objects)

## Good Example:

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

## Color Contrast Tools

Color contrast tools tell if the combination of colors used are accessible.

The Accessibility Insights windows application includes a color contrast evaluation tool. Enter a ticket with the Help Desk to get it downloaded.

[Colour Contrast Analyzer](#)

WebAIM has an informative article on, [Contrast and Color Accessibility](#).

## Color Reliance

Color must not be the **only** way to present meaningful content or instructions. Using color alone to provide meaning excludes people who do not have good color perception or who are reading your document in poor lighting conditions.

**BAD EXAMPLE:**

<b>NOTE: Cells in red failed, cells in green passed.</b>	
<b>Perceivable</b>	<b>Pass/Fail</b>
1.1 Text Alternatives	
1.1.1 Non-text Content	
1.2 Time-based Media	
1.2.1 Audio-only and Video-only (Prerecorded)	
1.2.2 Captions (Prerecorded)	
1.2.3 Audio Description or Media Alternative (Prerecorded)	
1.2.4 Captions (Live)	
1.2.5 Audio Description (Prerecorded)	

**GOOD EXAMPLE:**

<b>Perceivable</b>	<b>Pass/Fail</b>
1.1 Text Alternatives	<b>FAILED</b>
1.1.1 Non-text Content	<b>FAILED</b>
1.2 Time-based Media	<b>PASSED</b>
1.2.1 Audio-only and Video-only (Prerecorded)	<b>PASSED</b>
1.2.2 Captions (Prerecorded)	<b>PASSED</b>
1.2.3 Audio Description or Media Alternative (Prerecorded)	<b>FAILED</b>
1.2.4 Captions (Live)	<b>PASSED</b>
1.2.5 Audio Description (Prerecorded)	<b>PASSED</b>