

Accessibility Standard: Section 508 (2017)

[Section 508 of the Rehabilitation Act - 82 FR 5790 \(2017\)](#)

Section 508 of the Rehabilitation Act of 1973 (amended 29 U.S.C. 794d) requires that US Federal employees with disabilities have access to information comparable to employees without disabilities. The technical requirements for websites were updated in January 2017, to incorporate WCAG 2.0 at level AA by reference.

Rules

This section lists the 296 rules for Section 508 (2017) supported by the current version of the product.

1.1 Text Alternatives

1.1.1 A Non-text Content - 22 rules

[applet](#) elements must contain alternative content.

[area](#) elements must have an [alt](#) attribute.

[img](#) elements must have an [alt](#) attribute.

[alt](#) text should not be an image file name.

[input type=image](#) elements must have a descriptive [alt](#) at...

[object](#) elements should contain alternative content.

[img alt](#) text must not use ASCII art (which includes smileys).

[alt](#) text should not contain placeholders like 'picture' or...

Figures and images in PDF documents should have non blank ALT...

[button](#) elements containing only an [img](#) must have an [alt](#)...

[Provide redundant text links for each active region of a server-side...](#)

[Use client-side image maps instead of server-side image maps,...](#)

[The `alt` text of this image mentions a color, which isn't useful...](#)

[This image has been updated without updating the `alt` attribute...](#)

[Do not use filenames, placeholders or empty text as text alternatives...](#)

[Decorative and spacer images must have a null `alt` attribute.](#)

[Decorative and spacer images must not use descriptive `alt` ...](#)

[An image with a null `alt` attribute should not have `title`,...](#)

[This page has words made of Unicode characters that look like...](#)

[Using the same `alt` text on adjacent images results in screen...](#)

[Using `alt` text which duplicates link text in the same link...](#)

[Word document contains a graphic without ALT text.](#)

1.2 Time Based Media

1.2.1 A Audio-only and Video-only (Prerecorded) - 1 rule

[Do not use filenames, placeholders or empty text as text alternatives...](#)

1.2.2 A Captions (Prerecorded) - No rules

1.2.3 A Audio Description or Media Alternative (Prerecorded) - No rules

1.2.4 AA Captions (Live) - No rules

1.2.5 AA Audio Description (Prerecorded) - No rules

1.3 Adaptable

1.3.1 A Info and Relationships - 33 rules

[Headings should not contain other headings.](#)

[Mark up lists and list items properly. Avoid using images as...](#)

[Identify row and column headers in data tables using `th` elements,...](#)

[For data tables that have two or more logical levels of row or...](#)

[If a table is used for layout, do not use any structural markup...](#)

[Do not provide a `summary` attribute or `caption` for layout...](#)

[All `fieldset` elements should be labeled with `legend` elements.](#)

[`label` elements should be attached to the controls they label.](#)

[The `label` element is blank.](#)

[PDFs must be tagged to be accessible by screen readers.](#)

[PDF security on the document prevents screen readers accessing...](#)

[Use HTML headings instead of applying CSS heading styles to ...](#)

[An image of text has been used as a heading instead of using...](#)

[Use semantic markup like `strong` instead of using the CSS `font-weight`...](#)

[Using spaces to create multiple columns results in screen readers...](#)

[This element uses JavaScript to behave like a link. Links like...](#)

[A `fieldset` element has been used to give a border to text.](#)

[This form control has no `label` and no programmatically determined...](#)

[The `aria-labelledby` attribute references a non-existent element...](#)

[The `aria-labelledby` attribute references a blank element.](#)

This form control has a blank label or title.

This `input` button has no `value` attribute and no programmatically...

This `button` element is empty and has no programmatically determined...

Content inserted with CSS is not read by some screen readers,...

The `headers` attribute references a non-existent table header...

Important content has been hidden from screen readers using ...

Identify row and column headers in Word tables.

Attribute `aria-activedescendant` value should either refer to...

The `aria-controls` attribute must point to IDs of elements in...

The `aria-describedby` attribute must point to IDs of elements...

The `aria-flowto` attribute must point to IDs of elements in...

The `aria-labelledby` attribute must point to IDs of elements...

The `aria-owns` attribute must point to IDs of elements in the...

1.3.2 A Meaningful Sequence - 7 rules

The `lang` attribute specifies a language written right-to-left, ...

The `dir` attribute does not match the writing direction of the...

Absolute CSS positioning can make pages unreadable when style...

Inserting spaces between letters in a word means screen readers...

Using spaces to create multiple columns results in screen readers...

This page uses nested tables, which do not make sense when read...

[Word document contains a non-inline graphic or object.](#)

1.3.3 A Sensory Characteristics - 1 rule

[frame title must describe function rather than visual relationship...](#)

1.4 Distinguishable

1.4.1 A Use of Color - 2 rules

[The alt text of this image mentions a color, which isn't useful...](#)

[Removing the underline from links makes it hard for color-blind...](#)

1.4.2 A Audio Control - 2 rules

[A sound plays longer than 3 seconds, without a way to turn it...](#)

[An HTML5 media element automatically plays sound, without a way...](#)

1.4.3 AA Contrast (Minimum) - 2 rules

[If you set any of the colors on the body or a elements you...](#)

[Ensure that text and background colors have enough contrast.](#)

1.4.4 AA Resize Text - 1 rule

[Use relative units in CSS property values when zoom is disabled...](#)

1.4.5 AA Images of Text - 1 rule

[Equations rendered as images should be marked up with MathML....](#)

2.1 Keyboard Accessible

2.1.1 A Keyboard - 14 rules

Provide redundant text links for each active region of a server-side...

For SCRIPTs and APPLETs, ensure that event handlers are input...

Use client-side image maps instead of server-side image maps,...

All `onmouseup` handlers should have an equivalent `onkeyup` ...

All `onmouseover` handlers should have an equivalent `onfocus` ...

All `onmouseout` handlers should have an equivalent `onblur` ...

All `onmousedown` handlers should have an equivalent `onkeydown` ...

All `onclick` handlers should have an equivalent `onkeypress` ...

All `ondblclick` handlers should have an equivalent `onkey` ...
`select` lists cannot be operated from the keyboard if they have...

`onkey` handlers on static elements like `div` and `span` cannot...

This form automatically submits when focus changes making it...

This element uses JavaScript to behave like a link. Links like...

This field removes focus when tabbed to making it impossible...

2.1.2 A No Keyboard Trap - No rules

2.2 Enough Time

2.2.1 A Timing Adjustable - 3 rules

[Do not use the `meta` tag to automatically refresh a page as...](#)

[Do not use `meta refresh` with a non-zero timeout to automatically...](#)

[Do not use the Refresh HTTP header to automatically refresh a...](#)

2.2.2 A Pause, Stop, Hide - 8 rules

[Don't use CSS animations that run for more than 5 seconds without...](#)

[Scrolling `marquee` text is very hard to read for low vision...](#)

[The `blink` element can trigger epileptic seizures and cause...](#)

[Avoid animated images over 5 seconds long that can't be paused...](#)

[Avoid using Flash movies that run for more than 5 seconds and...](#)

[A video plays longer than 5 seconds, without a way to pause it.](#)

[CSS has been used to make an element blink, and there's no way...](#)

[This page uses script to create a blinking effect.](#)

2.3 Seizures

2.3.1 A Three Flashes or Below Threshold - 1 rule

[Web pages must not contain large images that flash more than...](#)

2.4 Navigable

2.4.1 A Bypass Blocks - 3 rules

[`iframe` and `frame` elements must have `title` attributes.](#)

[Frame `title` must not be the same as the frame `src` file name.](#)

[This skip link is broken. The target anchor does not exist or...](#)

2.4.2 A Page Titled - 4 rules

Document must have a title.

Document `title` must not be blank.

Document title must not contain placeholder text like 'Untitled'...

Some pages have the same `title`, so the title cannot be used...

2.4.3 A Focus Order - 1 rule

The tab order does not follow logical sequences on the page.

2.4.4 A Link Purpose (In Context) - 4 rules

Provide redundant text links for each active region of a server-side...

Each `a` element must contain text or an `img` with an `alt`...

Link uses general text like 'Click Here' with no surrounding...

Using `alt` text which duplicates link text in the same link...

2.4.5 AA Multiple Ways - 1 rule

Provide information about the general layout of a site using...

2.4.6 AA Headings and Labels - 4 rules

Headings should not be empty.

The `label` element is blank.

Form field labels should be unique on a page, or enclosed in...

Radio buttons with very generic labels need to be enclosed in...

2.4.7 AA Focus Visible - 2 rules

This field removes focus when tabbed to making it impossible...

[The CSS outline or border style on this element makes it difficult...](#)

3.1 Readable

3.1.1 A Language of Page - 1 rule

[Use the `lang` attribute to identify the language of the page.](#)

3.1.2 AA Language of Parts - 1 rule

[Phrases in a different language should be in a `span` or `div`...](#)

3.2 Predictable

3.2.1 A On Focus - 2 rules

[The page shows a popup when the page is loaded.](#)
[This field removes focus when tabbed to making it impossible...](#)

3.2.2 A On Input - 3 rules

[The `select` lists cannot be operated from the keyboard if they have...](#)
[This form automatically submits when focus changes making it...](#)
[This element uses JavaScript to launch a new window without warning...](#)

3.2.3 AA Consistent Navigation - No rules

3.2.4 AA Consistent Identification - No rules

3.3 Input Assistance

3.3.1 A Error Identification - No rules

3.3.2 A Labels or Instructions - 2 rules

[All `fieldset` elements should be labeled with `legend` elements.](#)

[A group of phone numbers fields needs a label or instructions...](#)

3.3.3 AA Error Suggestion - No rules

3.3.4 AA Error Prevention (Legal, Financial, Data) - No rules

4.1 Robust

4.1.1 A Parsing - 180 rules

[This page has markup errors, causing screen readers to miss ...](#)

[This page has duplicate IDs which cause problems in screen r...](#)

[The element `form` must not appear as a descendant of the `form` ...](#)

[The element `progress` must not appear as a descendant of the...](#)

[The element `meter` must not appear as a descendant of the `meter` ...](#)

[The element `dfn` must not appear as a descendant of the `dfn` ...](#)

[The element `noscript` must not appear as a descendant of the...](#)

[The element `label` must not appear as a descendant of the `label` ...](#)

[The element `address` must not appear as a descendant of the...](#)

[The element `section` must not appear as a descendant of the...](#)

[The element `nav` must not appear as a descendant of the `address` ...](#)

[The element `article` must not appear as a descendant of the...](#)

[The element `header` must not appear as a descendant of the `header` ...](#)

[The element `header` must not appear as a descendant of the `footer` ...](#)

[The element `header` must not appear as a descendant of the `address`...](#)

[The element `footer` must not appear as a descendant of the `header`...](#)

[The element `footer` must not appear as a descendant of the `footer`...](#)

[The element `header` must not appear as a descendant of the `dt`...](#)

[The element `footer` must not appear as a descendant of the `dt`...](#)

[The element `article` must not appear as a descendant of the...](#)

[The element `nav` must not appear as a descendant of the `dt`...](#)

[The element `section` must not appear as a descendant of the...](#)

[The element `h1` must not appear as a descendant of the `dt`...](#)

[The element `h2` must not appear as a descendant of the `dt`...](#)

[The element `h3` must not appear as a descendant of the `dt`...](#)

[The element `h4` must not appear as a descendant of the `dt`...](#)

[The element `h5` must not appear as a descendant of the `dt`...](#)

[The element `h6` must not appear as a descendant of the `dt`...](#)

[The element `hgroup` must not appear as a descendant of the `dt`...](#)

[The element `header` must not appear as a descendant of the `th`...](#)

[The element `footer` must not appear as a descendant of the `th`...](#)

[The element `article` must not appear as a descendant of the...](#)

The element `nav` must not appear as a descendant of the `th`...

The element `section` must not appear as a descendant of the...

The element `h1` must not appear as a descendant of the `th`...

The element `h2` must not appear as a descendant of the `th`...

The element `h3` must not appear as a descendant of the `th`...

The element `h4` must not appear as a descendant of the `th`...

The element `h5` must not appear as a descendant of the `th`...

The element `h6` must not appear as a descendant of the `th`...

The element `hgroup` must not appear as a descendant of the `th`...

The element `footer` must not appear as a descendant of the `address`...

The element `h1` must not appear as a descendant of the `address`...

The element `h2` must not appear as a descendant of the `address`...

The element `h3` must not appear as a descendant of the `address`...

The element `h4` must not appear as a descendant of the `address`...

The element `h5` must not appear as a descendant of the `address`...

The element `h6` must not appear as a descendant of the `address`...

The element `table` must not appear as a descendant of the `caption`...

The element `a` must not appear as a descendant of the `a` `e`...

The element `a` must not appear as a descendant of the `button`...

The element `button` must not appear as a descendant of the `a`...

The element `button` must not appear as a descendant of the `button`...

The element `details` must not appear as a descendant of the...

The element `details` must not appear as a descendant of the...

The element `embed` must not appear as a descendant of the `a`...

The element `embed` must not appear as a descendant of the `button`...

The element `iframe` must not appear as a descendant of the `a`...

The element `iframe` must not appear as a descendant of the `button`...

The element `label` must not appear as a descendant of the `a`...

The element `label` must not appear as a descendant of the `button`...

The element `select` must not appear as a descendant of the `a`...

The element `select` must not appear as a descendant of the `button`...

The element `textarea` must not appear as a descendant of the...

The element `textarea` must not appear as a descendant of the...

The element `main` must not appear as a descendant of the `a`...

The element `main` must not appear as a descendant of the `address`...

The element `main` must not appear as a descendant of the `article`...

The element `main` must not appear as a descendant of the `aside` ...

The element `main` must not appear as a descendant of the `audio` ...

The element `main` must not appear as a descendant of the `blockquote` ...

The element `main` must not appear as a descendant of the `canvas` ...

The element `main` must not appear as a descendant of the `caption` ...

The element `main` must not appear as a descendant of the `dd` ...

The element `main` must not appear as a descendant of the `del` ...

The element `main` must not appear as a descendant of the `details` ...

The element `main` must not appear as a descendant of the `dialog` ...

The element `main` must not appear as a descendant of the `dt` ...

The element `main` must not appear as a descendant of the `fieldset` ...

The element `main` must not appear as a descendant of the `figure` ...

The element `main` must not appear as a descendant of the `footer` ...

The element `main` must not appear as a descendant of the `header` ...

The element `main` must not appear as a descendant of the `ins` ...

The element `main` must not appear as a descendant of the `li` ...

The element `main` must not appear as a descendant of the `main` ...

The element `main` must not appear as a descendant of the `map` ...

[The element `main` must not appear as a descendant of the `nav`...](#)

[The element `main` must not appear as a descendant of the `noscript`...](#)

[The element `main` must not appear as a descendant of the `object`...](#)

[The element `main` must not appear as a descendant of the `section`...](#)

[The element `main` must not appear as a descendant of the `slot`...](#)

[The element `main` must not appear as a descendant of the `td`...](#)

[The element `main` must not appear as a descendant of the `th`...](#)

[The element `main` must not appear as a descendant of the `video`...](#)

[The `a` element must not appear as a descendant of an element...](#)

[The `a` element must not appear as a descendant of an element...](#)

[The `button` element must not appear as a descendant of an element...](#)

[The `button` element must not appear as a descendant of an element...](#)

[The `details` element must not appear as a descendant of an element...](#)

[The `details` element must not appear as a descendant of an element...](#)

[The `embed` element must not appear as a descendant of an element...](#)

[The `embed` element must not appear as a descendant of an element...](#)

[The `iframe` element must not appear as a descendant of an element...](#)

[The `iframe` element must not appear as a descendant of an element...](#)

[The `label` element must not appear as a descendant of an element...](#)

[The `label` element must not appear as a descendant of an element...](#)

[The `select` element must not appear as a descendant of an element...](#)

[The `select` element must not appear as a descendant of an element...](#)

[The `textarea` element must not appear as a descendant of an...](#)

[The `textarea` element must not appear as a descendant of an...](#)

[An element with the attribute `tabindex` must not appear as a...](#)

[An element with the attribute `tabindex` must not appear as a...](#)

[The `audio` element with the attribute `controls` must not appear...](#)

[The `audio` element with the attribute `controls` must not appear...](#)

[The `img` element with the attribute `usemap` must not appear...](#)

[The `img` element with the attribute `usemap` must not appear...](#)

[The `input` element must not appear as a descendant of an element...](#)

[The `input` element must not appear as a descendant of an element...](#)

[The `menu` element with the attribute `toolbar` must not appear...](#)

[The `menu` element with the attribute `toolbar` must not appear...](#)

[The `object` element with the attribute `usemap` must not appear...](#)

[The `object` element with the attribute `usemap` must not appear...](#)

[The `video` element with the attribute `controls` must not appear...](#)

[The `video` element with the attribute `controls` must not appear...](#)

[An element with `role=button` must not appear as a descendant...](#)

[An element with `role=button` must not appear as a descendant...](#)

[An element with `role=checkbox` must not appear as a descendant...](#)

[An element with `role=checkbox` must not appear as a descendant...](#)

[An element with `role=combobox` must not appear as a descendant...](#)

[An element with `role=combobox` must not appear as a descendant...](#)

[An element with `role=grid` must not appear as a descendant of...](#)

[An element with `role=grid` must not appear as a descendant of...](#)

[An element with `role=gridcell` must not appear as a descendant...](#)

[An element with `role=gridcell` must not appear as a descendant...](#)

[An element with `role=listbox` must not appear as a descendant...](#)

[An element with `role=listbox` must not appear as a descendant...](#)

[An element with `role=menu` must not appear as a descendant of...](#)

[An element with `role=menu` must not appear as a descendant of...](#)

[An element with `role=menubar` must not appear as a descendant...](#)

[An element with `role=menubar` must not appear as a descendant...](#)

[An element with `role=menuitem` must not appear as a descendant...](#)

[An element with `role=menuitem` must not appear as a descendant...](#)

[An element with `role=menuitemcheckbox` must not appear as a...](#)

[An element with `role=menuitemcheckbox` must not appear as a...](#)

[An element with `role=menuitemradio` must not appear as a descendant...](#)

[An element with `role=menuitemradio` must not appear as a descendant...](#)

[An element with `role=option` must not appear as a descendant...](#)

[An element with `role=option` must not appear as a descendant...](#)

[An element with `role=radio` must not appear as a descendant...](#)

[An element with `role=radio` must not appear as a descendant...](#)

[An element with `role=scrollbar` must not appear as a descendant...](#)

[An element with `role=scrollbar` must not appear as a descendant...](#)

[An element with `role=searchbox` must not appear as a descendant...](#)

[An element with `role=searchbox` must not appear as a descendant...](#)

[An element with `role=slider` must not appear as a descendant...](#)

[An element with `role=slider` must not appear as a descendant...](#)

[An element with `role=spinbutton` must not appear as a descendant...](#)

[An element with `role=spinbutton` must not appear as a descendant...](#)

An element with `role=switch` must not appear as a descendant...

An element with `role=switch` must not appear as a descendant...

An element with `role=tab` must not appear as a descendant of...

An element with `role=tab` must not appear as a descendant of...

An element with `role=textbox` must not appear as a descendant...

An element with `role=textbox` must not appear as a descendant...

An element with `role=treeitem` must not appear as a descendant...

An element with `role=treeitem` must not appear as a descendant...

An element with `role=cell` must be contained in, or owned by...

An element with `role=option` must be contained in, or owned...

An element with `role=menuitem` must be contained in, or owned...

An element with `role=menuitemcheckbox` must be contained in...

An element with `role=menuitemradio` must be contained in, or...

An element with `role=tab` must be contained in, or owned by...

An element with `role=treeitem` must be contained in, or owned...

An element with `role=listitem` must be contained in, or owned...

An element with `role=gridcell` must be contained in, or owned...

An element with `role=columnheader` must be contained in, or...

[An element with `role=rowheader` must be contained in, or owned...](#)

[An element with `role=row` must be contained in, or owned by...](#)

[An element with `role=rowgroup` must be contained in, or owned...](#)

[HTML5 Parse Error.](#)

4.1.2 A Name, Role, Value - 16 rules

[`iframe` and `frame` elements must have `title` attributes.](#)

[Frame `title` must not be the same as the frame `src` file name.](#)

[`label` elements should be attached to the controls they label.](#)

[The `label` element is blank.](#)

[Each `a` element must contain text or an `img` with an `alt`...](#)

[This image has been updated without updating the `alt` attribute...](#)

[This element uses JavaScript to make a div or span behave like...](#)

[This form control has no `label` and no programmatically determined...](#)

[The `aria-labelledby` attribute references a non-existent element...](#)

[The `aria-labelledby` attribute references a blank element.](#)

[This form control has a blank label or title.](#)

[This `input` button has no `value` attribute and no programmatically...](#)

[This `button` element is empty and has no programmatically determined...](#)

[Flash 6 and earlier does not expose the focus location to screen...](#)

[All fields in a group of input fields \(for example phone numbers\)...](#)

[This page has a Flash movie which references Flash version 5...](#)

