

How To – PDF Accessibility

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PDFs (Portable Document Formats) can offer many advantages, including preserving print design, making information sharing efficient, and providing forms your website visitors need.

However, PDFs can also have significant accessibility drawbacks, especially for blind or vision-impaired individuals.

This **How To** provides an overview on how to make PDFs accessible.

Why It's Important to Make PDFs Accessible

Laws Require PDF Accessibility

The United States, the European Union, Canada, and Australia all have laws mandating accessibility for all forms of communication with individuals with disabilities, including PDFs.

Improved SEO

Making PDFs accessible can help them rank higher in searches because Google will be better able to understand what the PDF is about.

Better Audience Engagement

Neglecting PDF accessibility limits potential audience reach and could lead to missed conversions. For example, if someone can't understand a PDF form due to lack of accessibility, they won't be able to fill it out.

PDFs Are Not Responsive

PDFs are documents designed and optimized for printing—not for viewing on tiny screens. They can also have a very large file size, which can take a long time to download on a mobile connection or be too large for a user's device.

What Makes a PDF Accessible

To achieve accessibility, PDFs need specific formatting to be readable by screen readers and other assistive devices.

- PDFs should be designed for keyboard navigation and include tags that provide structure to the document.
- Accessible PDFs should also indicate reading order, make tables and forms understandable to visually impaired users, and provide alternative text for images.
- It's also essential to ensure that text passes color contrast checks so that it can be easily read by people with low vision.

How to Make a PDF Accessible

You must do specific things within your source document to achieve accessibility.

Once you generate the PDF from your source document, there are additional things you need to do to the PDF itself to finish the process of making it accessible.

Therefore, you always have manual steps to take with both the source document and the PDF.

Step 1 - Build the Source Document

The majority of the PDF accessibility work can (and should) be done within your source document (i.e., the platform where you're creating the file that is getting saved as a PDF).

Building everything correctly from the start will make the work you need to do to the generated PDF much easier.

Things That Need to Be Considered and Formatted Correctly to Meet Accessibility Standards

- Document title
- Logical reading order

• Content tags

- Image alt text
- Heading hierarchy
- Text color contrast
- Bookmarks
- Forms and tables
- Hyperlinks



How you build these elements to make accessible PDFs varies based on the platform you're using to create the document. Here are some helpful resources to point you in the right direction:

- InDesign Adobe's Creating Accessible PDFs documentation or The Admin Bar member Colleen Gratzer's <u>online course on making accessible PDFs from InDesign</u>
- Microsoft Office Microsoft's documentation on <u>creating accessible PDFs in Word</u> and PowerPoint
- **Google Workspace** Google's tutorial for <u>making accessible PDFs from Google Docs</u> <u>and Slides</u>

Step 2 - Generate the PDF and Make It Accessible

Once the source document is built, the PDF needs to be generated and additional steps should be taken to make it accessible.

Using the full version of Adobe Acrobat, you can perform these important accessibility steps with the PDF, such as tagging, adding alternative text for images, and more.

Step 3 – Test the PDF

Testing is done using a combination of automated accessibility tools and manual testing.

Automated tools are a great start, but they don't catch everything. And some testing can only be accomplished manually, such as checking text color contrast, keyboard navigation, and screen reader accessibility.

Automated tools that can help find accessibility problems in PDFs include:

- Adobe Acrobat Pro's Accessibility Check
- PAC 2021 (free, open-source PDF Accessibility Checker)
- CommonLook PDF Validator
- Web Content Accessibility Guidelines (WCAG)
- How to test PDFs for accessibility by Equalize Digital

Keep in mind that each time you change something in your source document and generate a new PDF, you will have to redo any accessibility testing and work done to the PDF.

If PDF testing identifies items to be fixed, a more permanent and efficient solution is to go back to the source document and remediate anything you can there instead of in the PDF.



Can I Make PDF Accessibility Easier?

Ask Yourself: Does It Really Need to Be a PDF?

If you've read this far, maybe even checked out some of the links, you probably think this sounds like a lot of work to make accessible PDFs. You're right! So ...

The first rule of PDF accessibility is **don't use PDFs**.

The best thing to do is identify PDFs that can be rebuilt as standard web pages.

- It's much easier to put PDF content on your website just as a web page.
- This also has the added benefit of being easier for content managers to update the content in the future, which is a big win.

Even PDF forms can be rebuilt as web forms.

- This makes them much easier for the user to complete.
- Web forms can be integrated with other systems as needed.
- If you need the form entry to print out on a PDF document, that can be done with add-ons for popular form plugins. (See the "Additional Resources" section below.)

Check Your Plugins

PDF Embed Plugins

All the available plugins that embed PDFs in pages (rather than downloading or linking to them) add at least some accessibility problems to the page.

Some render the PDF utterly inaccessible because they load the PDF as an image or unlabeled HTML canvas element, so none of the text on the PDF can be accessed with a screen reader.

If the plugin is using an iFrame to display the PDF, that may work better than other options, but you should still provide a link to download or open the PDF directly.

Image Optimization Plugins

Some image optimization plugins will strip the necessary tags from PDFs when compressing them. If you have an optimization plugin on your website, ensure it is set to ignore PDFs.



Additional Resources

- InDesign & PDF Accessibility Mistakes & How to Fix Them with Colleen Gratzer (meetup)
- The Impact of Accessible Web Documents Requirements with Dax Castro (meetup)
- <u>Create Accessible PDFs on Section508.gov</u> (includes a 1-hour training on testing and remediating PDFs)
- PDF Accessibility Facebook Group
- Web form-to-PDF plugin add-ons: <u>E2PDF</u> (integrates with nine different form plugins), <u>Fillable PDFs</u> for Gravity Forms, <u>Gravity PDF</u> for Gravity Forms, <u>PDF Forms Filler for Contact</u> <u>Form 7</u>

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