



WordCamp
Netherlands
2025

Accessible documents by design

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Hi, I'm Ed Boon

Vision@dd

Accessibility for all. Basic skills for everyone. Clear language and simple processes. It starts with a website, a form, and a simply structured Word or InDesign document.

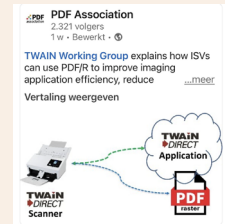
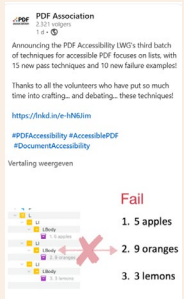
- Documents accessible, archivable and searchable.
- Helping everyone participate in the digital society.
- Simplifying processes from smart forms to smart ERP.
- A future-proof strategy with accessible documents.



To start with some updates on accessibility

The accessibility is full innovative and continuesly in renewing. Please read the latest news in the underneath links.

- Use the right [autotagger](#) according the actual PDF syntax: 1.7 or 2.0
- Check the innovations on pdf fundamentals [pdfa.org](#)
- See messages on my [website](#) visioned.net
- TOC discussion <ref> versus <link>
- Using Canva
- Using VennGage
- Using Adobe Express
- Mistral.ai (demo when we have time left)





A good accessible document start with the basic

An accessible document starts with a basic lay-out. The semantic structure is the most important item for readability in Assistive Technology.

- Semantic structure
- The right styles in accordance your company brand
- The right fonts according fit to the [Matterhorn protocol](#)
- Enriched color contrasts fits to your company brand



The most common failures with wrong colors which not fits accessibility

Orange and yellow are always difficult colours. Make orange contrastful. People with colour-blindness see get a dirty brown colour. Test your colours with the underneath tools:

- Webaim colour contrast [checker](#)
- Use the app Colour Contrast Checker ([CCA](#))
- Use the [app colorshark.io](#) to test all kinds of colour-blindness's
- Better: Design your brand color in [color.adobe.com](#)



A bad colour contrast

One of the most common used colour: orange for a company's brand and shows in different gradations.

Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground
Hex Value
#FFFFFF
Color Picker
Alpha
1
Lightness

Background
Hex Value
#FF5F00
Color Picker
Lightness

Contrast Ratio
3.04:1

[permalink](#)

Normal Text

WCAG AA: **Fail**
WCAG AAA: **Fail**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Pass**
WCAG AAA: **Fail**

The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: **Pass**

★
Text Input

The screenshots show the Contrast Checker tool with different background colors: orange, olive, and grey. Each screenshot displays the text 'AA Large' and its contrast ratio against the background. The orange background shows a contrast ratio of 3.06, the olive background shows 3.08, and the grey background shows 3.08. The tool also includes a 'Simulate Color Blindness' section on the right, which allows users to test their colors against various color vision deficiencies.



Colour contrast checker (my brand color)

One of the most common used checker: [WebAIM: Contrast Checker](#)

Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground

Hex Value
#663366

Color Picker

Alpha
1

Lightness

Background

Hex Value
#FFFFFF

Color Picker

Lightness

Contrast Ratio
9.41:1
[permalink](#)

Normal Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: **Pass**

Text Input

BRIEF
[Onderwerp]

Uw kenmerk: E-mail → Datum aanvraag: 22-5-2022 → Datum offerte: 10-11-2022

[Naam bedrijf of organisatie]
t.o.v. [gecoördineerde]
[Adres en huisnummer]
[Postcode] [Woonplaats]

[Aanhef],
[Brieftoest]

Uw vriendelijke groot,
Ed. doont
Vision&add

[Aanhef],
1. - [Vul in bijlage 1]
2. - [Vul in bijlage 2]

Aangesloten als Ambassadeur en aanjager toegankelijkheid van Allartite digital samenlevt
In april 2021 heb ik mij hierin aangesloten als aanjager van de digitale toegankelijkheid en denk mee in oplossingen voor mensen met een digitale achterstand. Meer informatie is [hier](#) te lezen.

Tester van ontoegankelijke apps en websites voor AppIt
In juni 2022 heb ik mij hierin aangesloten als tester van ontoegankelijke apps en websites. Meer informatie is [hier](#) te lezen.

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LinkedIn: [http://www.linkedin.com/company/vision&add](#) Twitter: [www.twitter.com/vision&add](#)



Check on colour blindness

This is a checker what shows what people with different kind of diseases not see.:

Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground

Hex Value
#FFFFFF

Color Picker

Alpha
1

Lightness

Background

Hex Value
#663366

Color Picker

Lightness

Contrast Ratio
9.41:1
[permalink](#)

Normal Text

WCAG AA: **Pass**

WCAG AAA: **Pass** The five boxing wizards jump quickly.

Large Text

WCAG AA: **Pass**

WCAG AAA: **Pass** The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: **Pass** ★

Text Input

WebAIM Accessibility Testing Services

Web accessibility testing can be difficult! The experts at WebAIM can audit your web site and provide a detailed report to help you remediate accessibility and WCAG compliance issues.

[Learn more about WebAIM Evaluation Services](#)

Text

ffffff

Hex 0°

Saturation 0%

Lightness 100%

Background

663366

Hex 300°

Saturation 33%

Lightness 30%

AAA

9.41

Simulate Color Blindness

Test your colors against certain deficiencies.

Ordered by population

- ☐ **Normal Vision**
Person can see all colors naturally
- ☐ **Deuteranomaly**
Person sees low amounts of green
- ☐ **Protanomaly**
Person sees low amounts of red
- ☐ **Protanopia**
Person sees no red
- ☐ **Deuteranopia**
Person sees no green
- ☒ **Tritanopia**
Person sees no blue
- ☐ **Tritanomaly**
Person sees low amounts of blue
- ☐ **Achromatomaly**
Person sees the absence of most color
- ☐ **Achromatopsia**
Person sees no color at all

Text

ffffff

Hex 0°

Saturation 0%

Lightness 100%

Background

663366

Hex 300°

Saturation 33%

Lightness 30%

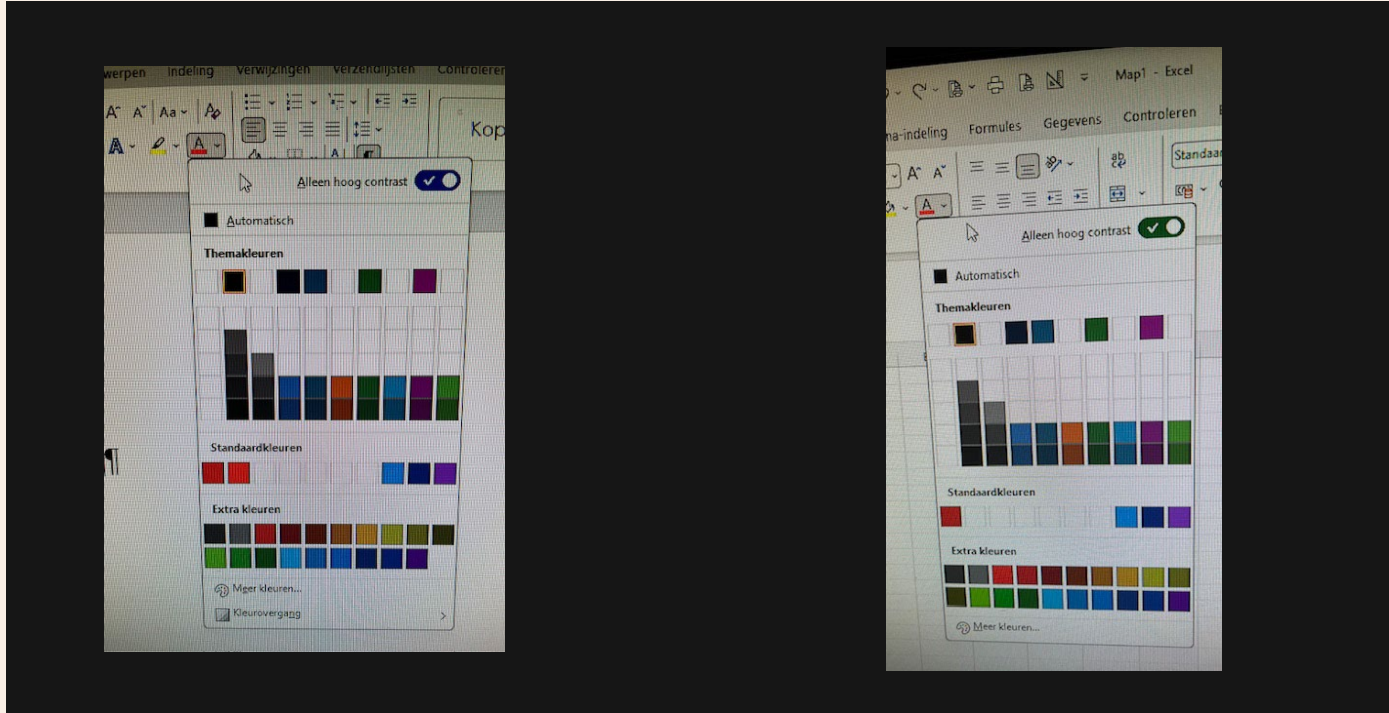
AAA

9.41



Use contrast enriched colors in Word & PowerPoint

Accessibility improvement in Microsoft. Use the allow high contrast switch.





The basic of a design: use the base pages in Adobe InDesign

Always design one or more base pages, for instance: the cover, content pages and image pages. The basic pages are the base for your accessible document.

- Don't tag non-functional graphical elements as artefact
- Tag page numbers and footer titles as artefacts
- Partition your layers per subject, e.g. pictures, artwork, content, metadata
- **Don't:** Use layers for sorting pages in the pdf.
- **Do:** Use paragraph styles and export the styles to semantic tags
- **Do:** Use the articles panel for sorting



The framework for a base design

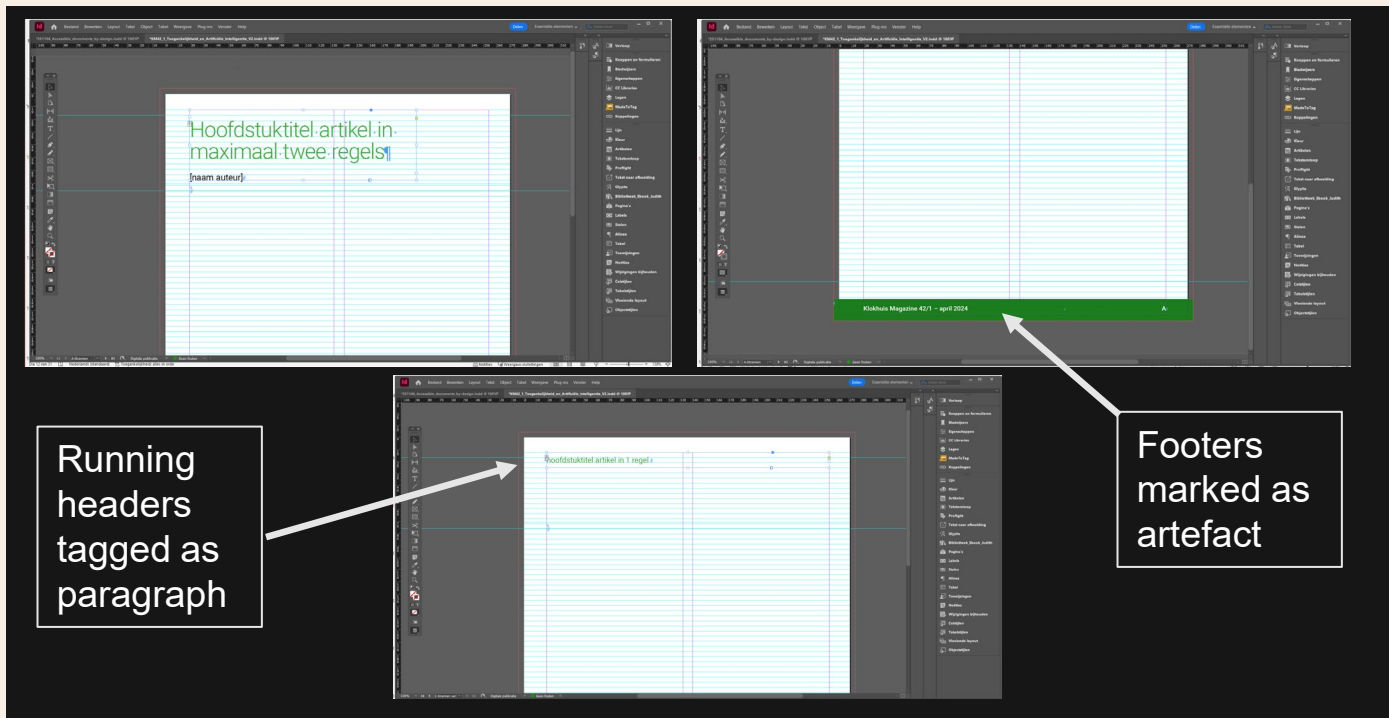
Framework for a well-designed document





The base-layout in InDesign

Start with a base lay-out is the start to Accessibility





Add descriptive texts to images, infographic elements or hyperlinks

Add a descriptive text to an image or hyperlink (internal or external) which is functional. If not: make an image artefact.

- Place an image inline
- Write a short text (maximum 264 characters)
- Icons always artefact
- **Don't:** Use sample text made by Word. Be creative



A good accessible document is readable for everyone

When use the right font size, space before and after and left and right margin.
The Assistive Technology is better capable to read the document.

- Font size with a minimum of 16 pixels,
- Alignment set to 1,5 from the font size,
- To read the heading (H1 etcetera) add some space before/after a style,
- To read the paragraph properly add some space left, right and after,
- Use B1 language to make text understandable for everyone,
- Use GREG styles in the paragraph styles best practice is `^[ \t]+(?:=\\r)`
- **Don't:** use hard return except at a paragraph transition.

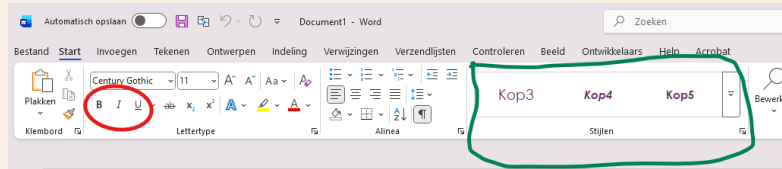


A good accessible document is readable for everyone (continued)



Below some best practices when using styles in Word or Indesign.

- Heading levels higher than level 6 are not read als heading but paragraph
- Use in Word the Outline view for showing structure
- MS Word is not showing skipped headings. Check Acrobat Pro, Common Look or PAC checker
- **Don't:** use **attributes** in the Word ribbon or InDesign ribbon. Use **styles**



- If bold or italic is used you can update by selecting the bold or italic text, Go to styles. Select the relevant style and select update the style.



A good accessible document has a readable navigation

A large document needs a navigation like a table of contents with tagged bookmarks and clickable links. If a document is larger an index to search on keywords is recommended.

- Use H1 and H2 required as bookmark and H3 and Hn for large documents,
- Use a paragraph of character style for each bookmark.
- Use a link to the paragraph in the document is essential,
- Use descriptive text to the bookmarks
- Use GREP styles for hard returns
- **Don't:** use hard return except at a paragraph transition.

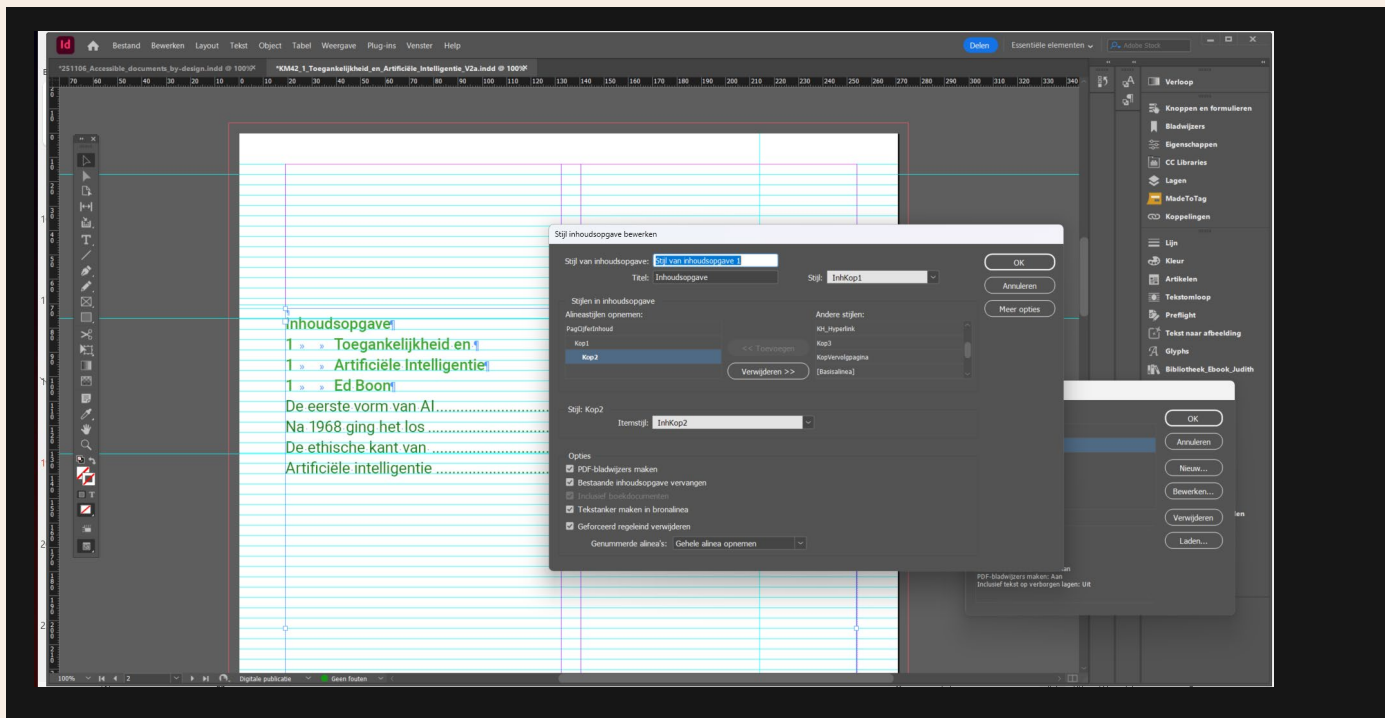




Navigable and readable table of contents



A table of contents dynamically generated from headings shows captions, labels and bookmarks to navigate properly





Accessible documents: check and test before publishing

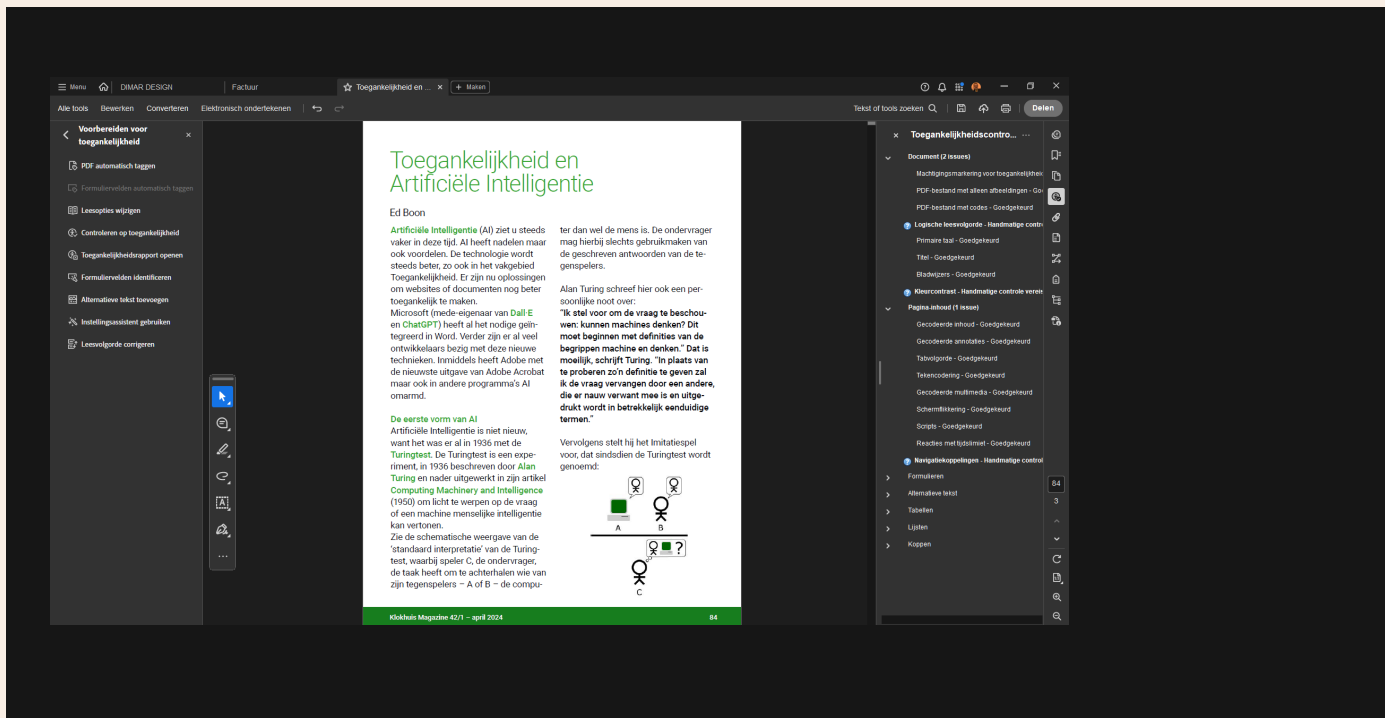
An accessible document needs to be checked before publishing. That's essential. When the document is finished:

1. Check if all the readable headings and texts are added as an article,
2. Check the preflight box if there are no overflowing texts,
3. Check if the paragraph styles have exported to pdf tags (or tag as e-pub)
4. **Tip:** Make package in InDesign and the export the document to pdf
5. **Do:** Test in Adobe Acrobat Pro and PAC 2024
6. **Do:** Test in Assistive technology
7. **Final:** Preflight and add the PDF/UA 1 identifier for 3 green marks



Test in Acrobat Accessibility checker or other software

Use the pdf software of your choice to check





Check the PAC checker

Check to get the green checkmarks, if not go back to the source or if no remediate source

PAC 2024 - PDF Accessibility Checker 2024

Document openen

Titel [geen titel]

Bestandsnaam Van-uit-het-hart_v2_flowable.pdf

Taal nl-NL

Pagina's 4

Tags 34

Grootte 175 KB

☒ PDF/UA ☒ WCAG ☒ Kwaliteit

Dit pdf-bestand voldoet niet aan PDF/UA.

Controlepunt	Voldoet	Waarschuwing	Fout
✓ PDF Syntax (ISO 32000-1)	47	-	-
✓ Lettertypes	8	-	-
✗ Inhoud	799	-	2
✓ Ingesloten bestanden	-	-	-
✓ Natuurlijke taal	343	-	-
✗ Strukturelementen	5	-	1
✓ Structuurbom	34	-	-
✓ Roltoewijzingen	55	-	-
✗ Alternatieve beschrijvingen	-	-	2
✗ Metadata	1	-	2
✗ Documentinstellingen	2	-	1

☒ Gedetailleerde resultaten ☒ Pdf-rapport

PAC 2024 - PDF Accessibility Checker 2024

Document openen

Titel Toegankelijkheid en Artistiek: Intelligent...c 42/1

Bestandsnaam KM42_1_Toegankelijkheid_en_Artistiek...c 42/1

Taal nl-NL

Pagina's 3

Tags 100

Grootte 186 KB

☒ PDF/UA ☒ WCAG ☒ Kwaliteit

Er wordt voldaan aan de PDF/UA-vereisten die door PAC zijn gecontroleerd.

Controlepunt	Voldoet	Waarschuwing	Fout
✓ PDF Syntax (ISO 32000-1)	115	-	-
✓ Lettertypes	9	-	-
✓ Inhoud	7206	-	-
✓ Ingesloten bestanden	-	-	-
✓ Natuurlijke taal	3543	-	-
✓ Strukturelementen	70	-	-
✓ Structuurbom	100	-	-
✓ Roltoewijzingen	121	-	-
✓ Alternatieve beschrijvingen	2	-	-
✓ Metadata	3	-	-
✓ Documentinstellingen	6	-	-

☒ Gedetailleerde resultaten ☒ Pdf-rapport



Accessible take-aways

For look over when you are at home working on your future accessible documents.

- Use the best practices for accessible documents
- Use the pdf fundamentals from the PDF Association
- Tag the paragraphs while designing the styles
- Check the warnings in PAC 2024, like whitespaces, table issues and not tagged paths,
- **Do:** Save this presentation in your bookmarks.
- **Tip:** Try and buy [MadeToTag](#) for extra help.



Thanks for your attention!

I hope that you learned from my workshop
accessible documents by design.

Please share your feedback to:

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Ed Boon

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WhatsApp: +31 6 22 04 26 39 or via [Slack](#) or **Signal**

Find the slides at my website

From december 1st! See the page:

[Presentatie Accessible documents by design](#)

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