

**Onshape CAD**  
**Accessibility Conformance Report**  
**WCAG Edition**  
**(Based on VPAT® Version 2.4)**



**Name of Product/Version:**

Onshape (version 1.162)

**Report Date:**

April 28, 2023

**Product Description:**

Onshape is a professional-grade computer-aided design (CAD) and design management system, delivered over the Internet via a software as a service (SaaS) model. It is built for virtual teams and allows real-time collaboration.

## Contact Information:

For any questions about the accessibility of this application, please contact [onshape-compliance@ptc.com](mailto:onshape-compliance@ptc.com).

## Evaluation Methods Used:

[Perkins Access](#), an independent accessibility consulting division of [Perkins School for the Blind](#), was contracted by PTC, the maker of Onshape, to test the product and document their findings in this VPAT. Perkins Access accessibility consultants thoroughly reviewed the Onshape application for conformance to the Web Content Accessibility Guidelines 2.1 Level A and Level AA using a variety of manual testing techniques, assistive technologies and the exclusive use of the keyboard to operate the product.

## Applicable Standards/Guidelines

This report covers the degree of conformance for the following accessibility standard/guidelines:

Standard/Guideline	Included In Report
<a href="#">Web Content Accessibility Guidelines 2.0</a>	Level A (Yes) Level AA (Yes) Level AAA (No)
<a href="#">Web Content Accessibility Guidelines 2.1</a>	Level A (Yes) Level AA (Yes) Level AAA (No)

## Terms

The terms used in the Conformance Level information are defined as follows:

- **Supports:** The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.
- **Partially Supports:** Some functionality of the product does not meet the criterion.
- **Does Not Support:** The majority of product functionality does not meet the criterion.
- **Not Applicable:** The criterion is not relevant to the product.

- **Not Evaluated:** The product has not been evaluated against the criterion. This can be used only in WCAG 2.0 Level AAA.

## WCAG 2.1 Report

Note: When reporting on conformance with the WCAG 2.1 Success Criteria, they are scoped for full pages, complete processes, and accessibility-supported ways of using technology as documented in the [WCAG 2.0 Conformance Requirements](#).

**Table 1: Success Criteria, Level A**

Criteria	Conformance Level	Remarks and Explanations
<a href="#">1.1.1 Non-text Content</a> (Level A)	Does Not Support	Most non-text content found in Onshape that is presented to the user does not have a text alternative that serves the equivalent purpose.
<a href="#">1.2.1 Audio-only and Video-only (Prerecorded)</a> (Level A)	Supports	Onshape does not have any prerecorded audio-only or prerecorded video-only media that would require alternative formats.
<a href="#">1.2.2 Captions (Prerecorded)</a> (Level A)	Supports	Onshape does not have synchronized media with prerecorded audio content that would require captions.
<a href="#">1.2.3 Audio Description or Media Alternative (Prerecorded)</a> (Level A)	Supports	Onshape does not have synchronized media with prerecorded video content that would require an audio description or an alternative format.
<a href="#">1.3.1 Info and Relationships</a> (Level A)	Partially Supports	Most information in Onshape that is conveyed through presentation can be programmatically determined, with the following exceptions: <ul style="list-style-type: none"> <li>• Implicit headings are not identified programmatically</li> <li>• HTML sectioning elements are not used to establish landmark regions</li> <li>• A chat iframe lacks an accessible name</li> <li>• A table is used for layout purposes</li> <li>• Div elements are used to structure data tables</li> </ul>
<a href="#">1.3.2 Meaningful Sequence</a> (Level A)	Partially Supports	When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined in almost all cases. However, toolbar submenus with confirm and cancel controls require navigating backward to operate.
<a href="#">1.3.3 Sensory Characteristics</a> (Level A)	Supports	Instructions provided for understanding and operating Onshape do not rely solely on sensory characteristics such as shape, size, visual location, orientation, or sound.

Criteria	Conformance Level	Remarks and Explanations
<a href="#"><b>1.4.1 Use of Color</b></a> (Level A)	Supports	Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
<a href="#"><b>1.4.2 Audio Control</b></a> (Level A)	Supports	Onshape does not have audio that plays automatically for more than 3 seconds that would require a mechanism to pause, stop or control the audio volume independently from the overall system volume level.
<a href="#"><b>2.1.1 Keyboard</b></a> (Level A)	Partially Supports	<p>Some user interface controls in Onshape are operable through a keyboard interface and do not require the use of a mouse, except for:</p> <ul style="list-style-type: none"> <li>• Navigation links under My Account</li> <li>• Primary toolbar buttons</li> <li>• Help links</li> <li>• Buttons that open submenus</li> </ul>
<a href="#"><b>2.1.2 No Keyboard Trap</b></a> (Level A)	Partially Supports	Focus can be moved away from most user interface controls in Onshape when using only a keyboard interface, except for the tab manager panel, which prevents keyboard focus from leaving the panel.
<a href="#"><b>2.1.4 Character Key Shortcuts</b></a> (Level A 2.1 only)	Does Not Support	Onshape contains several keyboard shortcuts that are implemented using only a single character that cannot be turned off or remapped.
<a href="#"><b>2.2.1 Timing Adjustable</b></a> (Level A)	Does Not Support	Onshape has a 4 hour idle timeout for authentication and 1 hour idle timeout for active modeling. These timeouts cannot be turned off, adjusted or extended.
<a href="#"><b>2.2.2 Pause, Stop, Hide</b></a> (Level A)	Supports	Onshape does not have moving, blinking, scrolling, or information that updates automatically that would require a mechanism to pause, stop or hide the content.
<a href="#"><b>2.3.1 Three Flashes or Below Threshold</b></a> (Level A)	Supports	Onshape does not have flashing content.
<a href="#"><b>2.4.1 Bypass Blocks</b></a> (Level A)	Does Not Support	Onshape does not have a mechanism for bypassing blocks of repetitive content.
<a href="#"><b>2.4.2 Page Titled</b></a> (Level A)	Supports	Onshape has unique web page titles that describe each page's topic or purpose.
<a href="#"><b>2.4.3 Focus Order</b></a> (Level A)	Partially Supports	Most of the interactive components within Onshape receive focus in an order that preserves meaning and operability, except for buttons in the header region that contain positive tabindex values and may result in an unintuitive focus order.

Criteria	Conformance Level	Remarks and Explanations
<a href="#"><b>2.4.4 Link Purpose (In Context)</b></a> (Level A)	Partially Supports	<p>The purpose of links in Onshape can be determined from the link text alone or from the link text together with its programmatically determined link context, except for:</p> <ul style="list-style-type: none"> <li>• Help icon links</li> <li>• Search clear and submit icon links</li> <li>• Notifications link</li> </ul>
<a href="#"><b>2.5.1 Pointer Gestures</b></a> (Level A 2.1 only)	Partially Supports	<p>Onshape does not rely on multipoint (such as pinch zoom) or path-based (such as swipe) gestures to operate, except for:</p> <ul style="list-style-type: none"> <li>• Tab and layer reordering</li> <li>• Part selections within canvas</li> </ul>
<a href="#"><b>2.5.2 Pointer Cancellation</b></a> (Level A 2.1 only)	Partially Supports	<p>Functionality that can be operated using a single pointer does not execute on a down event (such as tap down or click down), except for accordion components, which are triggered on down events.</p>
<a href="#"><b>2.5.3 Label in Name</b></a> (Level A 2.1 only)	Supports	<p>All user interface controls in Onshape have accessible names / labels that contain the same text as the component's visible label, where applicable.</p>
<a href="#"><b>2.5.4 Motion Actuation</b></a> (Level A 2.1 only)	Supports	<p>Onshape does not include functionality that can be operated by device or user motion.</p>
<a href="#"><b>3.1.1 Language of Page</b></a> (Level A)	Supports	<p>The default human language of each page in Onshape can be programmatically determined.</p>
<a href="#"><b>3.2.1 On Focus</b></a> (Level A)	Supports	<p>When user interface controls in Onshape receive focus, they do not result in a change of context.</p>
<a href="#"><b>3.2.2 On Input</b></a> (Level A)	Supports	<p>When user interface controls in Onshape receive input, they do not initiate a change of context.</p>
<a href="#"><b>3.3.1 Error Identification</b></a> (Level A)	Partially Supports	<p>If an input error is automatically detected in Onshape, the item that is in error is identified and the error is described to the user in text, except for an error message that may appear when configuring two-factor authentication.</p>
<a href="#"><b>3.3.2 Labels or Instructions</b></a> (Level A)	Does Not Support	<p>Visible labels or instructions are not programmatically associated with input fields throughout Onshape.</p>
<a href="#"><b>4.1.1 Parsing</b></a> (Level A)	Partially Supports	<p>User agents, including assistive technologies, can accurately interpret and parse most of the content in Onshape. However, the W3C markup validator identified markup errors on some pages in the application.</p> <ul style="list-style-type: none"> <li>• Elements with duplicate ID attributes</li> </ul>

Criteria	Conformance Level	Remarks and Explanations
		<ul style="list-style-type: none"> <li>Elements not allowed as children of a given element</li> <li>Elements missing required attributes</li> <li>Invalid attribute values on elements</li> </ul>
<a href="#"><b>4.1.2 Name, Role, Value</b></a> (Level A)	Partially Supports	<p>The name and role for most user interface controls in Onshape can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. However, the following controls are missing accessible names and / or role information:</p> <ul style="list-style-type: none"> <li>Primary toolbar controls and submenus</li> <li>My Account navigation</li> <li>Accordions across the application</li> <li>Document tabs</li> <li>Dialog titles</li> <li>Iframe titles</li> <li>Panel and dialog close buttons</li> <li>Account and help menus</li> </ul>

**Table 2: Success Criteria, Level AA**

Criteria	Conformance Level	Remarks and Explanations
<a href="#"><b>1.2.4 Captions (Live)</b></a> (Level AA)	Supports	Onshape does not have synchronized media with live audio content that would require captions.
<a href="#"><b>1.2.5 Audio Description (Prerecorded)</b></a> (Level AA)	Supports	Onshape does not have synchronized media with prerecorded video content that would require audio description.
<a href="#"><b>1.3.4 Orientation</b></a> (Level AA 2.1 only)	Supports	Content in Onshape does not restrict its view and operation to a single display orientation, such as portrait or landscape.
<a href="#"><b>1.3.5 Identify Input Purpose</b></a> (Level AA 2.1 only)	Partially Supports	The purpose of each input field collecting information about the user can be programmatically determined, except for first and last name form fields in My Account.

Criteria	Conformance Level	Remarks and Explanations
<a href="#"><b>1.4.3 Contrast (Minimum)</b></a> (Level AA)	Partially Supports	<p>The visual presentation of text and images of text has a contrast ratio of at least 4.5:1 with surrounding colors, except for:</p> <ul style="list-style-type: none"> <li>• Form labels</li> <li>• Footer text</li> <li>• Field description text in My Account</li> </ul>
<a href="#"><b>1.4.4 Resize text</b></a> (Level AA)	Does Not Support	Onshape has text that cannot be resized 200 percent without loss of content or functionality.
<a href="#"><b>1.4.5 Images of Text</b></a> (Level AA)	Supports	Onshape uses machine-readable text to convey information rather than images of text.
<a href="#"><b>1.4.10 Reflow</b></a> (Level AA 2.1 only)	Does Not Support	When setting the browser zoom to 400% starting with a 1280 pixel width and 1024 pixel height, the Onshape application does not reflow so that content is presented without loss of information or functionality.
<a href="#"><b>1.4.11 Non-text Contrast</b></a> (Level AA 2.1 only)	Partially Supports	<p>The visual presentation of user interface components and graphical objects in Onshape have a contrast ratio of at least 3:1 with surrounding colors, except for:</p> <ul style="list-style-type: none"> <li>• Help icons</li> <li>• View / orientation controls</li> <li>• Text and checkbox borders</li> </ul>
<a href="#"><b>1.4.12 Text Spacing</b></a> (Level AA 2.1 only)	Supports	No loss of content or functionality occurs by setting line spacing to at least 1.5 times the font size, spacing following paragraphs to at least 2 times the font size, letter spacing to at least 0.12 times the font size and word spacing to at least 0.16 times the font size.
<a href="#"><b>1.4.13 Content on Hover or Focus</b></a> (Level AA 2.1 only)	Does Not Support	Where the pointer hover or keyboard focus triggers additional content to become visible, the new content is not dismissible, hoverable, or persistent.
<a href="#"><b>2.4.5 Multiple Ways</b></a> (Level AA)	Does Not Support	Onshape does not provide more than one way to locate a specific Web page within a set of Web pages.
<a href="#"><b>2.4.6 Headings and Labels</b></a> (Level AA)	Supports	Headings and labels that describe the topic or purpose of content and controls are present in Onshape.
<a href="#"><b>2.4.7 Focus Visible</b></a> (Level AA)	Does Not Support	The keyboard focus indicator is not visible on most user interface components within Onshape.

Criteria	Conformance Level	Remarks and Explanations
<a href="#"><b>3.1.2 Language of Parts</b></a> (Level AA)	Supports	The human language of each passage or phrase in the content within Onshape can be programmatically determined.
<a href="#"><b>3.2.3 Consistent Navigation</b></a> (Level AA)	Supports	Navigational mechanisms that are repeated on multiple pages within Onshape occur in the same relative order each time they are repeated.
<a href="#"><b>3.2.4 Consistent Identification</b></a> (Level AA)	Supports	Components that have the same functionality within Onshape are identified consistently.
<a href="#"><b>3.3.3 Error Suggestion</b></a> (Level AA)	Supports	Suggestions are provided to the user if an input error is automatically detected and suggestions for correction are known.
<a href="#"><b>3.3.4 Error Prevention (Legal, Financial, Data)</b></a> (Level AA)	Supports	Onshape has a way to reverse changes to user-controllable data in data storage systems and has a way to review user test responses prior to submitting.
<a href="#"><b>4.1.3 Status Messages</b></a> (Level AA 2.1 only)	Partially Supports	<p>Most status messages in Onshape can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus. Status messages are not programmatically determinable for:</p> <ul style="list-style-type: none"> <li>• Document search results</li> <li>• Feature search results</li> <li>• Insert parts and assemblies results</li> </ul>

## Legal Disclaimer

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