

# Working with AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 Software and Section 508

Section 508 requires that federal agencies' electronic and information technology is accessible to people with disabilities. The Center for Information Technology Accommodation (CITA) in the U.S. General Services Administration's Office of Government-wide Policy has been charged with the task of educating federal employees and building the infrastructure necessary to support Section 508 implementation.

With this white paper, Autodesk offers background information to help our customers understand the accessibility features of Autodesk's AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 Software and Section 508, in the context of the Section 508 standards. This was done with the intent to enable agencies to be compliant with the Section 508 regulations.

The document contains subsets of the Electronic and Information Technology Accessibility Standards as published in 36 CFR Part 1194 and provides an analysis of AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 Software against these standards.

For the purposes of this paper, "AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 refers to AutoCAD Civil 3D 2010 and AutoCAD Civil 2010 Software.

The first table of the Template provides a summary view of the Section 508 Standards. The subsequent tables provide more detailed views of each applicable subsection.

There are three columns in each table. Column one of the Summary Table describes the subsections of subparts B and C of the 508 Standards. The second column describes the supporting features of the product or refers readers to the corresponding detailed table, e.g., "equivalent facilitation." The third column contains any additional remarks and explanations regarding the product. In the subsequent tables, the first column contains the lettered paragraphs of the subsections of the 508 Standards. The second column describes the supporting features of the product with regard to that paragraph. The third column contains any additional remarks and explanations regarding the product.

This document is not intended to be a certification of compliance. This template is based upon version 1.2 (5/6/2004) supplied by the U.S. Government.

More information on Section 508 can be found on the Government's website located at:

<http://www.section508.gov/>

<b>Summary Table</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
Section 1194.21	Software Applications and Operating Systems	Supports with exceptions
Section 1194.22	Web-based Internet Information and Applications	Not applicable
Section 1194.23	Telecommunications Products	Not applicable
Section 1194.24	Video and Multi-media Products	Not applicable
Section 1194.25	Self-Contained, Closed Products	Not applicable
Section 1194.26	Desktop and Portable Computers	Not applicable
Section 1194.31	Functional Performance Criteria	Supports with exceptions
Section 1194.41	Information, Documentation and Support	Supports

<b>Section 1194.21 Software Applications and Operating Systems</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and explanations</b>
<p>(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.</p>	<p>Supports with exceptions</p>	<p>Keyboard input is provided for most commands.</p> <p>Also, a command line enables the user to type in commands directly and specify other input.</p> <p>Supports keytips for ribbon tabs and most widgets in ribbon.</p> <p>When panels are minimized, keytips don't work. The Panel minimize function does not have a keyboard access method.</p> <p>Provides inconsistent information about user interface elements via the Microsoft Accessibility Applications. For example ribbon text and tooltips are not available to Microsoft Narrator. Tooltip equivalents of ribbon buttons text are provided, but audio versions are not supported.</p> <p>Toolbar and ribbon button images have textual equivalents.</p>
<p>(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application</p>	<p>Supports</p>	<p>Testing* has indicated that AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 software programs do not disrupt the accessibility features of other products on the user's system.</p>

<p>programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.</p>		
<p>(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.</p>	<p>Supports</p>	<p>Focus is programmatically exposed through command line scripting, Microsoft® Visual Basic® for Applications (VBA), and C++ programming interface.</p>
<p>(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.</p>	<p>Supports</p>	<p>AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 software provide information to the user via the Microsoft Active Accessibility application.</p>
<p>(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.</p>	<p>Supports</p>	<p>Bitmap images and actions associated with them are consistent.</p>
<p>(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.</p>	<p>Supports</p>	<p>A text window records the log of what is being done. This log file can be saved.</p>
<p>(g) Applications shall not override user selected contrast and color selections and other individual display attributes.</p>	<p>Supports with Exception</p>	<p>Application does not override contrast and color selections. Application performs acceptably under High Contrast settings with some exceptions. Also the user has the ability to change color settings.</p>

<p>(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.</p>	<p>Supports</p>	<p>Animated displays are included only within the product's help system. The same information is documented with text and images.</p>
<p>(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.</p>	<p>Supports</p>	<p>Color-coding is not used as the only means of conveying information. The user can enter a color index or in certain cases an RGB value. Users can also use predefined named colors as described by PANTONE®, RAL, and DIC® color systems.</p>
<p>(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.</p>	<p>Supports</p>	<p>AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 provide a wide variety of color selections. The user has the ability to customize the application window. Users can also use predefined named colors as described by PANTONE, RAL, and DIC.</p>
<p>(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.</p>	<p>Supports</p>	<p>AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 do not use flashing or blinking text.</p>
<p>(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.</p>	<p>Supports</p>	<p>Microsoft Active Accessibility applications such as Narrator can be used to access particulars of the components of a form or dialog box.</p>

<b>Section 1194.31 Functional Performance Criterion</b>		
<b>Criteria</b>	<b>Supporting Features</b>	
(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.	Supports with exceptions	AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 support assistive technologies with minor exceptions like reading tooltips.
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	Supports with exceptions	No audio is available in the product.  Keyboard navigation is provided for all menu commands.  Also, a command line enables the user to type in commands and other input. This text input can be enlarged through product options. Microsoft Active Accessibility applications such as Narrator can be used to access most particulars of the components of a form or dialog box.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided.	Supports	AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 do not require user hearing to operate the software.
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Supports	AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 do not require user hearing to operate the software.
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with	Supports	AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 do not require user speech to operate the software.

disabilities shall be provided.		
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.	Supports with exception	<p>Keyboard navigation is provided for most AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 commands.</p> <p>Also, a Command Line allows the user to type in commands and other input. Some functions are not exposed through either</p> <p>the Menu or Command Line.</p>

<b>Section 1194.41 Information, Documentation and Support</b>		
<b>Criteria</b>	<b>Supporting Features</b>	
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.	Supports	Support documentation is available within the product, as hardcopy, or as Adobe PDF.
(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Supports	This document is posted on our website at <a href="http://www.autodesk.com">http://www.autodesk.com</a> . Search for "Section 508"
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports	Support services options are available via webpage, e-mail, fax, or phone. Direct, in-person support is also available through resellers.

\* Testing was performed by or commissioned by Autodesk and conducted over a controlled network in which accessibility consultants performed selected tasks designed to simulate day-to-day production drafting and examined the software with a variety of assistive technologies. As with all performance tests, results may vary based on machine, operating system, filters, and even source material. While every effort has been made to make the tests as fair and objective as possible, your results may differ.

Working with AutoCAD® Civil 3D® 2010 and AutoCAD® Civil 2010 Software and Section 508

Autodesk®, Civil 3D® and AutoCAD® are registered trademarks or trademarks of Autodesk, Inc., in the USA and/or other countries. Autodesk reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

© 2009 Autodesk, Inc. All rights reserved.