

# Westover Consultants, Inc.

## Documentation of Compliance with Section 508

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Authority: 29 U.S.C. 794d.

### Subpart A Overview of Section 508 Standards

#### § 1194.1 Purpose.

The purpose of this part is to implement section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794d). Section 508 requires that when Federal agencies develop, procure, maintain, or use electronic and information technology, Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities, unless an undue burden would be imposed on the agency. Section 508 also requires that individuals with disabilities, who are members of the public seeking information or services from a Federal agency, have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities, unless an undue burden would be imposed on the agency.

#### § 1194.2 Application.

(a) Products covered by this part shall comply with all applicable provisions of this part. When developing, procuring, maintaining, or using electronic and information technology, an agency shall ensure that the products comply with the applicable provisions of this part, unless an undue burden would be imposed on the agency.

(1) When compliance with the provisions of this part imposes an undue burden, agencies shall provide individuals with disabilities with the information and data involved by an alternative means of access that allows the individual to use the information and data.

(2) When procuring a product, if an agency determines that compliance with any provision of this part imposes an undue burden, the documentation by the agency supporting the procurement shall explain why, and to what extent, compliance with each such provision creates an undue burden.

(b) When procuring a product, each agency shall procure products which comply with the provisions in this part when such products are available in the commercial marketplace or when such products are developed in response to a Government solicitation. Agencies cannot claim a product as a whole is not commercially available because no product in the marketplace meets all the standards. If products are commercially available that meet some but not all of the standards, the agency must procure the product that best meets the standards.

(c) Except as provided by §1194.3(b), this part applies to electronic and information technology developed, procured, maintained, or used by agencies directly or used by a contractor under a contract with an agency which requires the use of such product, or requires the use, to a significant extent, of such product in the performance of a service or the furnishing of a product.

### § 1194.3 General exceptions.

(a) This part does not apply to any electronic and information technology operated by agencies, the function, operation, or use of which involves intelligence activities, cryptologic activities related to national security, command and control of military forces, equipment that is an integral part of a weapon or weapons system, or systems which are critical to the direct fulfillment of military or intelligence missions. Systems which are critical to the direct fulfillment of military or intelligence missions do not include a system that is to be used for routine administrative and business applications (including payroll, finance, logistics, and personnel management applications).

(b) This part does not apply to electronic and information technology that is acquired by a contractor incidental to a contract.

(c) Except as required to comply with the provisions in this part, this part does not require the installation of specific accessibility related software or the attachment of an assistive technology device at a workstation of a Federal employee who is not an individual with a disability.

(d) When agencies provide access to the public to information or data through electronic and information technology, agencies are not required to make products owned by the agency available for access and use by individuals with disabilities at a location other than that where the electronic and information technology is provided to the public, or to purchase products for access and use by individuals with disabilities at a location other than that where the electronic and information technology is provided to the public.

(e) This part shall not be construed to require a fundamental alteration in the nature of a product or its components.

(f) Products located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment are not required to comply with this part.

### § 1194.4 Definitions.

The following definitions apply to this part:

**Agency.** Any Federal department or agency, including the United States Postal Service.

**Alternate formats.** Alternate formats usable by people with disabilities may include, but are not limited to, Braille, ASCII text, large print, recorded audio, and electronic formats that comply with this part.

**Alternate methods.** Different means of providing information, including product documentation, to people with disabilities. Alternate methods may include, but are not limited to, voice, fax, relay service, TTY, Internet posting, captioning, texttospeech synthesis, and audio description.

**Assistive technology.** Any item, piece of equipment, or system, whether acquired commercially, modified, or customized, that is commonly used to increase, maintain, or improve functional capabilities of

individuals with disabilities.

**Electronic and information technology.** Includes information technology and any equipment or interconnected system or subsystem of equipment, that is used in the creation, conversion, or duplication of data or information. The term electronic and information technology includes, but is not limited to, telecommunications products (such as telephones), information kiosks and transaction machines, World Wide Web sites, multimedia, and office equipment such as copiers and fax machines. The term does not include any equipment that contains embedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are not information technology.

**Information technology.** Any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. The term information technology includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources.

**Operable controls.** A component of a product that requires physical contact for normal operation. Operable controls include, but are not limited to, mechanically operated controls, input and output trays, card slots, keyboards, or keypads.

**Product.** Electronic and information technology.

**Self Contained, Closed Products.** Products that generally have embedded software and are commonly designed in such a fashion that a user cannot easily attach or install assistive technology. These products include, but are not limited to, information kiosks and information transaction machines, copiers, printers, calculators, fax machines, and other similar types of products.

**Telecommunications.** The transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

**TTY.** An abbreviation for teletypewriter. Machinery or equipment that employs interactive text based communications through the transmission of coded signals across the telephone network. TTYS may include, for example, devices known as TDDs (telecommunication display devices or telecommunication devices for deaf persons) or computers with special modems. TTYS are also called text telephones.

**Undue burden.** Undue burden means significant difficulty or expense. In determining whether an action would result in an undue burden, an agency shall consider all agency resources available to the program or component for which the product is being developed, procured, maintained, or used.

## § 1194.5 Equivalent facilitation.

Nothing in this part is intended to prevent the use of designs or technologies as alternatives to those prescribed in this part provided they result in substantially equivalent or greater access to and use of a product for people with disabilities.

## Subpart B Westover Compliance with Technical Standards

### Westover's compliance with § 1194.21 (Software applications and operating systems)

(a) When designing software to run on a system that has a keyboard, Westover ensures that product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.

(b) Westover does 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. Westover also does not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.

(c) Westover provides a well defined onscreen indication of the current focus that moves among interactive interface elements as the input focus changes. The focus is programmatically exposed so that assistive technology will track focus and focus changes.

(d) Sufficient information about a user interface element including the identity, operation and state of the element is available to assistive technology. When an image represents a program element, the information conveyed by the image is also available in text.

(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images is consistent throughout an application's performance.

(f) Westover provides textual information is 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.

(g) Applications do not override user selected contrast and color selections and other individual display attributes.

(h) When animation is displayed, the information is displayable in at least one non-animated presentation mode at the option of the user.

(i) Color coding is not used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.

(j) Westover provides a variety of color selections capable of producing a range of contrast levels when a product permits a user to adjust color and contrast settings.

(k) Software does 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.

(l) When electronic forms are used, the form allows 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.

### Westover's compliance with § 1194.22 Web-based intranet and internet information and applications

(a) A text equivalent for every non-text element is provided (e.g., via "alt", "longdesc", or in element content).

(b) Westover synchronizes equivalent alternatives for any multimedia presentation.

(c) Westover designs web pages are so that all information conveyed with color is also available without color (e.g.

from context or markup).

(d) Westover organizes documents are so they are readable without requiring an associated style sheet.

(e) Redundant text links are provided for each active region of a serverside image map.

(f) Westover provides clientside image maps instead of serverside image maps except where the regions cannot be defined with an available geometric shape.

(g) Row and column headers are identifiable for data tables.

(h) Westover uses markup to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.

(i) Frames are titled with text that facilitates frame identification and navigation.

(j) Pages are designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.

(k) Westover provides a text only page, with equivalent information or functionality, to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text only page is updated whenever the primary page changes.

(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script is identified with functional text that can be read by assistive technology.

(m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21(a) through (l).

(n) When electronic forms are designed to be completed online, the form will 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.

(o) Westover provides a method that permits users to skip repetitive navigation links.

(p) When a timed response is required, Westover alerts the user and gives sufficient time to indicate more time is required.

#### Note to §1194.22:

1. The Board interprets paragraphs (a) through (k) of this section as consistent with the following priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) (May 5, 1999) published by the Web Accessibility Initiative of the World Wide Web Consortium:
2. Paragraphs (l), (m), (n), (o), and (p) of this section are different from WCAG 1.0. Web pages that conform to WCAG 1.0, level A (i.e., all priority 1 checkpoints) must also meet paragraphs (l), (m), (n), (o), and (p) of this section to comply with this section. WCAG 1.0 is available at <http://www.w3.org/TR/1999/WAI-WEBCONTENT19990505>.

Westover's compliance with § 1194.23 (Telecommunications products)

(a) Telecommunications products or systems which provide a function allowing voice communication and which do not themselves provide a TTY functionality is provided a standard non-acoustic connection point for TTYs. Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.

(b) Telecommunications products which include voice communication functionality supports all commonly used cross manufacturer nonproprietary standard TTY signal protocols.

(c) Voice mail, auto attendant, and interactive voice response telecommunications systems is usable by TTY users with their TTYs.

(d) Voice mail, messaging, auto attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, is given an alert when the time interval is about to run out, and provided sufficient time for the user to indicate more time is required.

(e) Where provided, caller identification and similar telecommunications functions is also be available for users of TTYs, and for users who cannot see displays.

(f) For transmitted voice signals, telecommunications products are provided a gain adjustable up to a minimum of 20 dB. For incremental volume control, at least one intermediate step of 12 dB of gain is provided.

(g) If the telecommunications product allows a user to adjust the receive volume, a function is provided to automatically reset the volume to the default level after every use.

(h) Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies is provided.

(i) Interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.

(j) Products that transmit or conduct information or communication, passes through cross manufacturer, non-proprietary, industry standard codes, translation protocols, formats or other information necessary to provide the information or communication in a usable format. Technologies which use encoding, signal compression, format transformation, or similar techniques does not remove information needed for access or shall restore it upon delivery.

(k) Products which have mechanically operated controls or keys, comply with the following:

(1) Controls and keys shall be tactilely discernible without activating the controls or keys.

(2) Controls and keys are operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls and keys are 5 lbs. (22.2 N) maximum.

(3) If key repeat is supported, the delay before repeat shall be adjustable to at least 2 seconds. Key repeat rate shall be adjustable to 2 seconds per character.

(4) The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.

#### Westover's compliance with § 1194.24 (Video and multimedia products)

(a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, are equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and standalone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry,

are equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.

(b) Television tuners, including tuner cards for use in computers, are equipped with secondary audio program playback circuitry.

(c) All training and informational video and multimedia productions which support Westover's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, is open or closed captioned.

(d) All training and informational video and multimedia productions which support Westover's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.

(e) Display or presentation of alternate text presentation or audio descriptions is user selectable unless permanent.

#### Westover's compliance with § 1194.25 (Self contained, closed products)

(a) Self contained products are usable by people with disabilities without requiring an end-user to attach assistive technology to the product. Personal headsets for private listening are not assistive technology.

(b) When a timed response is required, the user is alerted and given sufficient time to indicate more time is required.

(c) Where a product utilizes touch screens or contact sensitive controls, an input method is provided that complies with §1194.23 (k) (1) through (4).

(d) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, is also provided.

(e) When products provide auditory output, the audio signal is provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at anytime.

(f) When products deliver voice output in a public area, incremental volume control is provided with output amplification up to a level of at least 65 dB. Where the ambient noise level of the environment is above 45 dB, a volume gain of at least 20 dB above the ambient level shall be user selectable. A function is provided to automatically reset the volume to the default level after every use.

(g) Color coding is not being used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.

(h) When a product permits a user to adjust color and contrast settings, a range of color selections capable of producing a variety of contrast levels are provided.

(i) Products are designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.

(j) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls comply with the following:

(1) The position of any operable control shall be determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length (see [Figure 1](#) of this part).

(2) Where any operable control is 10 inches or less behind the reference plane, the height shall be 54

inches maximum and 15 inches minimum above the floor.

(3) Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 inches maximum and 15 inches minimum above the floor.

(4) Operable controls shall not be more than 24 inches behind the reference plane (see [Figure 2](#) of this part).

#### Westover's compliance with § 1194.26 (Desktop and portable computers)

(a) All mechanically operated controls and keys comply with §1194.23 (k) (1) through (4).

(b) If a product utilizes touch screens or touch operated controls, an input method is provided that complies with §1194.23 (k) (1) through (4).

(c) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, is also provided.

(d) Where provided, at least one of each type of expansion slots, ports and connectors comply with publicly available industry standards.

#### Subpart C Westover is in Compliance with Functional Performance Criteria

##### Westover's Compliance with § 1194.31 (Functional performance criteria).

(a) At least one mode of operation and information retrieval that does not require user vision is provided, or support for assistive technology used by people who are blind or visually impaired is provided.

(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 is provided in audio and enlarged print output working together or independently, or support for assistive technology used by people who are visually impaired is provided.

(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 is provided.

(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval is provided in an enhanced auditory fashion, or support for assistive hearing devices is provided.

(e) At least one mode of operation and information retrieval that does not require user speech is provided, or support for assistive technology used by people with disabilities is 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 is provided.

#### Subpart D Information, Documentation, and Support

##### Westover's Compliance with § 1194.41 (Information, documentation, and support)

(a) Product support documentation provided to end-users is made available in alternate formats upon request, at

no additional charge.

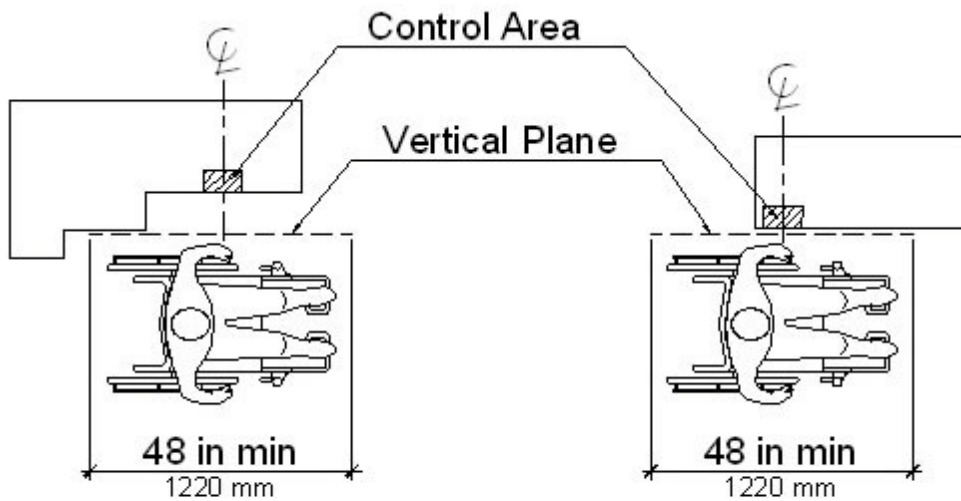
(b) End-users have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.

(c) Support services for products accommodate the communication needs of end-users with disabilities.

## Figures to Part 1194

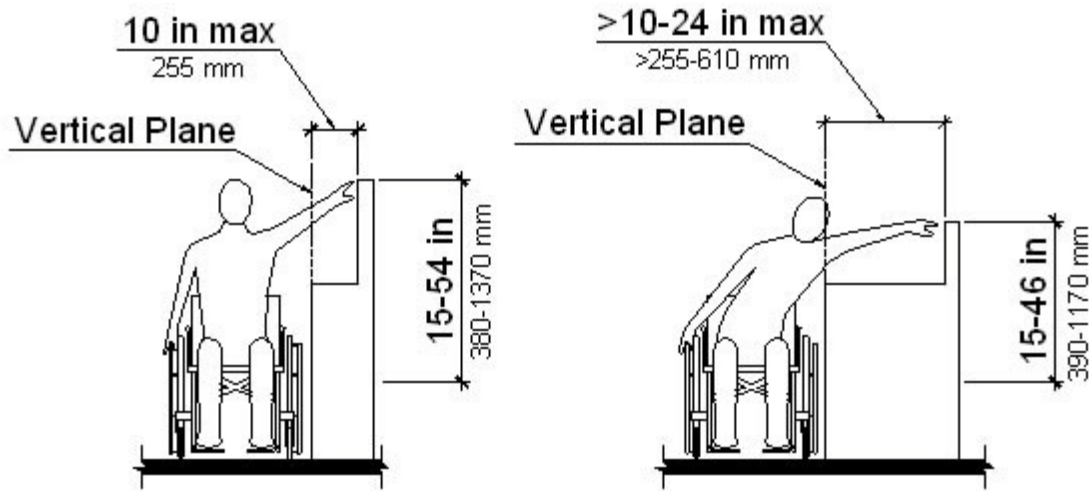
Figure 1 Vertical Plane Relative to Operative Control

Figure one above illustrates two bird's-eye views of the Vertical Plane Relative to Operative Control. In both views, the vertical plane is centered on the control area. In the first view, the vertical plane is set back from the control area by a protrusion on the device. In the second view, there are no protrusions on the device and the vertical plane is right up against the control area.



## Vertical Plane Relative to the Operable Control

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## Height of Operable Control Relative to the Vertical Plane

Figure 2 Height of Operative Control Relative to a Vertical Plane

Figure two above illustrates two front views of Height of Operable Control Relative to a Vertical Plane. The first view illustrates a reach of no more than 10 inches deep with the control area between 15 and 54 inches. The second view illustrates a reach greater than 10 inches but not more than 24 inches deep with the control area between 15 and 46 inches.

1 Section 508 does not apply to national security systems, as that term is defined in section 5142 of the ClingerCohen Act of 1996 (40 U.S.C. 1452).

2 The Access Board is an independent Federal agency established by section 502 of the Rehabilitation Act (29 U.S.C. 792) whose primary mission is to promote accessibility for individuals with disabilities. The Access Board consists of 25 members. Thirteen are appointed by the President from among the public, a majority of who are required to be individuals with disabilities. The other twelve are heads of the following Federal agencies or their designees whose positions are Executive Level IV or above: The departments of Health and Human Services, Education, Transportation, Housing and Urban Development, Labor, Interior, Defense, Justice, Veterans Affairs, and Commerce; the General Services Administration; and the United States Postal Service.

3 Whenever the Access Board revises its standards, the Federal Acquisition Regulatory Council is required to revise the FAR, and each appropriate Federal agency is required to revise its procurement policies and directives within six months to incorporate the revisions.

4 48 CFR Chapter 1, part 2, §2.101 Definitions Information Technology (c).