**ADA compliance guidelines smart door, smartphone app, and image descriptions**

**Image descriptions:** The following are best practices for ADA compliant captions/image descriptions:

* One to three lines of text appear on screen all at once, stay there for three to seven seconds, and are then replaced by another caption.
* Timed to synchronize with the audio.
* Do not cover up graphics and other essential visual elements of the picture.
* Require the use of upper and lowercase letters.
* Use a font similar to Helvetica medium.
* Have good resolution.
* Include not more than 32-characters-per-line.
* To check for compliancy, select the Captions options drop down > Show non-compliant duration. This option highlights any captions in red whose duration is not between three and seven seconds.
* Captions should be synchronized and appear at approximately the same time as the audio.
* Words should be verbatim when time allows or as close as possible in other situations.
* Captions should be accessible and readily available to those who need or want them.
* Add music or other descriptions inside square brackets such as [music] or [laughter].
* Captions should appear on screen long enough to be read.
* It is preferable to limit on screen captions to no more than three lines.
* Speakers should be identified when more than one person is onscreen or when the speaker is not visible.
* Punctuation is used to clarify meaning.
* Spelling is correct throughout the production.
* Write out sound effects when they add to understanding.
* All words are captioned, regardless of language or dialect.
* Use of slang and accent is preserved and identified.
* Use italics when a new word is being defined or a word is heavily emphasized in speech.

**Smart Door:** The following are best practices for ADA compliant smart door

* Closing Speed – If a door is equipped with an automatic closing device; [ADA Compliant Door Closers](https://www.trudoor.com/commercial-door-hardware/door-closers/) shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.
* Spring Hinges – Door spring hinges shall be adjusted so that from the open position of 70 degrees, the door shall move to the closed position in 1.5 seconds minimum.
* Door Opening Force – Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open a door or gate other than fire doors shall be as follows: Interior hinged doors: 5 pounds (22.2 N) maximum. These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position. The maximum force pertains to the continuous application of force necessary to fully open a door, not the initial force needed to overcome the inertia of the door.

**Electric communication:** The following are best practices for ADA compliant electric communicationespecially forOutput, Display, and Control Functions:

All information necessary for operating and using products must:

* be available in audible form and, where appropriate, tactile form (for people with no vision)
* be available in a form other than audible that is accessible to people with low vision and little or no hearing
* be available in visual form (for people with no hearing)
* be available in enhanced audible form, such as increased amplification, increased signal-to-noise ratio, or a combination (for people who are hard of hearing)
* allow moving text, where used, to be presented in a static form at the user’s option (for people with limited cognitive skills or vision)
* have minimum visual flicker (to help prevent seizures in persons with photosensitive epilepsy)
* allow audio cutoff where external speakers are used through standard connectors for headphones or personal listening devices
* minimize interference with hearing aids and other hearing technologies
* allow wireless coupling to hearing aids where audio tranducers normally held up to the ear are used

**Smartphone app:** The following are best practices for ADA smartphone app

* Providing a Transcript with Multimedia
* Making Your Design Colors Compliant
* Making Sure Error Messages Are Understood
* Providing proper guidance to access different intent/pages

<https://www.linkedin.com/pulse/ada-accessibility-remodeling-home-look-automation-joseph-castonguay/>

<https://www.rocalockandkey.com/3-facts-about-ada-compliance-with-locks-latches-and-controls>

<https://www.trudoor.com/ada-accessibility-guidelines/#:~:text=Door%20Hardware%20%E2%80%93%20Handles%2C%20pulls%2C,the%20finish%20floor%20or%20ground.>