



OSU Minimum Web Accessibility Standards (rev. 06/30/2004)

<http://www.wac.ohio-state.edu/standards/>



Standard 11 -- Screen Flicker. Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz .

Screen Flicker -- Dos and Don'ts

Do	Don ' t
Screen items which flicker (blink) must do so either at a rate of less than twice a second or more than 55 times a second. A Hertz (Hz) is a cycle per second.	Cause images to move too quickly or too slowly. Create images that flicker with intense contrast (e.g. black/white).

Why: Moving images can cause serious injury to those with epilepsy, migraines, or other vision-triggered conditions. And they are distracting and quickly become annoying for the rest of us. Use moving images only when necessary to interpreting content.

How: 2Hz = 2 flashes per second. 55Hz=55 flashes per second. Most image software divides a second into 100 units. 2Hz would equal 50/100 (2 flashes x 50units per sec = 100 units) and 55 Hz would equal 1.8/100 (55 flashes x 1.8 units per sec = 100 units). Animation should not be set between 2 and 55 Hz.

Do	Don ' t
Allow users to turn-off moving elements or cause movement to stop after a certain time frame or number of cycles.	Use too many flickering/moving elements on a page. Cause constant motion on a page.

Why: Besides being dangerous to some users, flashing and flickering elements distract from other content on the page.

How: There is no good method for turning off animated gifs. Therefore, designers should program gifs to stop after so-many cycles of the animation loop. Other objects, such as music clips, movies, or flash should include a javascript stop button to stop motion or sound.

Get more help with flicker and moving images, visit [Usability.gov's "Flicker."](#)



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