AAFP Display Advertising Creative Format Guidelines

Creative Unit name	Initial Dimensions (WxH in pixels)	File Formats Accepted	Max Initial File Load Size (See note 2 below)	Expansion Method (Mouse-Over or Click to Expand)	Animation/Video Guidelines (See video notes below)	Z-index Range	Unit-Specific Notes (See General Ad Requirements below)
Leaderboard	728x90	Display (.html, .js, images, etc.)	450KB (initial load 150KB)	Expansion not allowed for this unit	15 sec max animation length max loop 3 times	0 - 4,999	Ad unit content must be clearly distinguishable from normal webpage content (ad unit must have clearly defined borders and not be confused with normal page content).
Medium Rectangle	300x250	Display (.html, .js, images, etc.)	450KB (initial load 150KB)	Expansion not allowed for this unit	15 sec max animation length max loop 3 times	0 - 4,999	Ad unit content must be clearly distinguishable from normal webpage content (ad unit must have clearly defined borders and not be confused with normal page content).
Half Page Skyscraper	300x600	Display (.html, .js, images, etc.)	450KB (initial load 150KB)	Expansion not allowed for this unit	15 sec max animation length max loop 3 times	0 - 4,999	Ad unit content must be clearly distinguishable from normal webpage content (ad unit must have clearly defined borders and not be confused with normal page content).
Expandable/ Retractable	300x250 to 600x250 300x600 to 600x600 728x90 to 728x315	Display (.html, .js, images, etc.)	450KB (initial load 150KB)	Expansion must be user-initiated	"Minimum 24 fps for video 15 sec max length (unlimited user-initiated) 1.1 MB additional file size allowed for host-initiated video Unlimited file size for user-initiated video"	5,000 - 1,999,999 (for entire ad unit)	Retract Feature = Either Click to close/expand or Enable Mouse-Off Retraction
Smartphone Static Wide Banner Retractable	320x50	Display (.html, .js, images, etc.)	150KB (initial load 50KB)	Expansion not allowed for this unit	15 sec max length for animation Video not allowed for this unit. See "InBanner Video" & Rich Media units below for video	0 - 4,999	Ad unit content must be clearly distinguishable from normal webpage content (ad unit must have clearly defined borders and not be confused with normal page content).
Between-the-Page (aka "Interstitial")	300x250 300x600 800x400	Display (.html, .js, images, etc.)	600KB (initial load 200KB)	Expansion not applicable for this unit	15 sec max length for animation Video not allowed for this unit. See "InBanner Video" & Rich Media units below for video	N/A Unless the ad covers content on the target page, then use range for overlays: 6,000,000+	"Label = ""Advertisement"" Font = 8pt (11px) by 16pt (21px) ""Close"" control provided by browser window if ad displays in its own browser window. If overlaid on target page, include ""Close X"" button. Font = 8pt (11px) by 16pt (21px)"

General Ad Requirements (Apply to all ads):

Interest-Based Advertising (IBA): Include IBA self-regulation controls for ads using behavioral targeting (5 KB max file size)

Audio: Must be user-initiated. To allow for audio initiation in videos without player controls, a control may be included for user to initiate audio.

Hotspot: Not to exceed 1/4 size of ad. Initiated when cursor rests on hotspot for at least 1 sec. Must NOT initiate audio.

Defining ad space: Ad unit content must be clearly distinguishable from normal webpage content (ad unit must have clearly defined borders and not be confused with normal page content).

Max CPU: Ad not to exceed 30% CPU usage during host-initiated execution.

Submission lead time: Minimum lead time for ad file submission is 6 days before campaign start.

Max number of host-initiated file requests: Ad not to exceed 15 file requests during initial file load and host-initiated subload. Unlimited file requests allowed after user-interaction.

General Notes:

File weight calculation: All files for the ad (.html, .js, .css, images, etc.) must be included as part of the maximum file weight calculation for all file load limits. Shared libraries are also included as part of the file weight calculation unless otherwise exempted (see note 5). File weights are calculated after files have been compressed into gzip format (see note 7).

Initial file load: Includes all assets and files necessary for completing first visual display of the Ad.

Host-initiated subload: Where allowed, additional files may load one second after the browser domContentLoadedEventEnd event. The ad should be able to "listen" for the browser domContentLoadedEventEnd event before subsequent files beyond the initial max file size may be loaded.

User-initiated file size: Ads that allow additional file size for host-initiated subload also allow for unlimited file load after user-initiated interaction. User initiation is the willful act of a user to engage with an ad. Users may interact by clicking or tapping the ad, and/or rolling over an ad (or a portion of an ad).

Shared Libraries: Publishers are encouraged to approve the use of shared libraries for HTML5 ads and exempt them from the ad's file weight calculation. As part of the publisher's certification process, both the shared libraries and their sources must be approved before any shared libraries may be exempted from the ad's file weight.

File compression: Ads should be compressed before being served to a site. The most universally compatible format for file compression in transit over the Internet is gzip.

Video Notes:

Required for ads with video: Video may omit controls until user initiates interaction. Upon user interaction, video controls must include Play, Pause, Mute or volume control to zero (0) output for videos that expand out of initial ad upon interaction. For auto play videos that play in banner only Mute or volume control to zero(0) is required.

HTML5 video controls: To improve performance and reduce file size, use control attributes in the HTML5 video tag for controls instead of providing custom assets for displaying controls

Adaptive bitrate streaming: HTML5 does not support streaming video, but it can simulate a streaming experience using adaptive bitrate streaming technologies such as HLS and MPEG-DASH. Formatting files for adaptive bitrate streaming enables a smoother viewer experience. Adaptive bitrate streaming uses short fragments (2-3 seconds) of the video at different quality levels and stores them in a playlist file such as M3U8. During playback, the player detects bandwidth at the start of each fragment and plays the fragment at the quality level best suited to the bandwidth and player environment. Common protocols for adaptive bitrate streaming include HTTP Live Streaming (HLS) in the US and MPEG-DASH in the EU.

Video codec: Use MPEG-4 (MP4) file formats for H.264-encoded video for a more seamless delivery across devices. The H.264 codec should use a Baseline profile to allow for more diverse execution in systems that range from a cellular connection on a mobile screen to a high-speed cable connection on an HTTP-connect TV screen. For audio, AAC is more widely supported (PCM audio is unsupported in Flash players).

Video format: At a minimum, the MP4/H.264 file format should be provided, but alternate files using formats such as WebM and VP8 may also be submitted.

The MOOV atom: Use the web-optimized setting when encoding the MP4 file, which sets the MOOV (movie) atom at the start of the file.

HTML5 Notes:

HTML5 provides introduces new options for developing ads. The IAB has developed "HTML5 for Digital Advertising" (http://www.iab.com/html5) to help ad designers provide ads in HTML5 unit that will perform more successfully across the display advertising ecosystem. Please review this document and adopt its recommendations to help improve HTML5 ad performance in the industry.

HTML 5 should be in a zip files, per each size separately and should not exceed 1000KB. In the following link, you could find all the details regarding the HTML5 requirements:

https://support.google.com/admanager/answer/7046799?hl=en