

3D Advertising & Ecommerce File Requirements by Platform

Leveraging 3D across multiple platforms can be difficult due to the various file format requirements listed below. VNTANA's 3D Collaboration Platform makes this easy by automatically optimizing and converting 3D design files into the required formats. We unify and automate 3D workflows giving teams a centralized place to optimize, share, review, and distribute 3D models to ANY stakeholder or endpoint. One platform, every channel, fully automated.

	Google	Amazon	Facebook	Snap Lens	8th Wall/ Niantic	Spatial.io
Mesh File	GLTF (recommended), FBX, OBJ	glTF/ GLB (recommended), FBX <ul style="list-style-type: none"> All transformations have been frozen 	<ul style="list-style-type: none"> FBX 2014/2015 (binary and ASCII versions) glTF 2 (binary and text versions) COLLADA / DAE OBJ DAE All transforms must be applied.	FBX (recommended), OBJ, GLTF	GLB (glTF 2.0 Binary)	GLB/ glTF (recommended), FBX, OBJ, DAE, PCD
Size Limit	3mb or lower	N/A	6mb	NA, hard vertex limit	15mb	60mb
Vertex Limit	30,000	N/A	20,000	65,535	N/A	Recommended: <ul style="list-style-type: none"> For environment object: less than 100K For single object: less than 30K Maximum: <ul style="list-style-type: none"> For Environment object: 300K For single object: 50K
Poly Limit	12,000 (not a hard, but a recommended, limit)	150,000 tris – prefer visual quality over low file size, so in the event there is a high poly and low poly version, Amazon prefers the high poly.	50,000 tris per object, 150,000 max - final file size should not exceed 6mb	10,000 tris suggested - must be triangulated	35,000 max	Recommended: <ul style="list-style-type: none"> For environment object: less than 60K For single object: less than 15K Maximum: <ul style="list-style-type: none"> For Environment object: 180K For single object: 30K
Texture Formats	PNG (PNG-24, and indexed PNG-8), and JPG image formats.	JPG and PNG image formats PBR Metallic/Roughness	N/A	PNG or JPG Textures required (vertex colors not supported)	N/A	N/A
Texture Size	2048 x 2048	2048 x 2048 or 4096 x 4096	1024x1024 - must be power of 2	2048 x 2048	1024 x 1024 or smaller – power of 2	1024 x 1024 – 8 textures per file Maximum: 1024 x 1024, up to 16 textures OR 2048 x 2048, max of 4 textures per file.
Material	glTF PBR materials 15 or less unique object/ material combinations. For best performance, limit to only 1 draw call.	PBR	PBR	Supported material types: Diffuse, Lambert, Unlit, Occluder, Matte Shadow, PBR	N/A	Unlit (recommended), Metallic/ Roughness and Specular/ Glossiness PBR
Bone Limit	254 or less (includes non-weighted joints as well)	N/A	Use the least amount of bones possible	N/A	N/A	N/A
Joint Limit	254 joints	N/A	N/A	100 - 10 seconds or less of animation	N/A	N/A
Bones per Vertex Limit	4 bones per vertex or less - Each vertex can only be affected by 4 bones. Poly will discard any bone weights after the four most influential bones for each vertex.	N/A	N/A	N/A	N/A	N/A
Model UVs	Single UV set per mesh. Mirror when possible.	<ul style="list-style-type: none"> UVs must all be within one texture atlas, meaning placed in the main coordinate space (0,1). Single UV set, multiple UV sets are not supported. Double sided textures and geometry are not supported. All shells must have a minimum padding of 6 pixels on all sides, 16 pixels padding distance is recommended. UV shells should not be "flipped", as this can cause shading errors. 	<ul style="list-style-type: none"> Single UV per object Single UV set per mesh UV shells should not overlap Padding between UV shells of 8 pixels 	Single UV set per mesh.	N/A	N/A
Model Pivot	Recommended: placing the origin of uploaded models at either their geometric center or a centered position on the ground.	All models are aligned to floor, wall, or ceiling. More details can be found within the 3D Asset Alignment Specifications at https://shorturl.at/itvz0	Object's origin.	N/A	Base of the model (if you expect it to attach to the ground)	N/A
Model Scale	Working units are in meters - a distance of 1.0 units will be treated as 1 meter. Embedded scale factor conversions in model files are ignored by Poly, except for FBX files.	Model must use a real-world scale for AR. Scale must be measured in meters	Scale is in meters	N/A	N/A	N/A
Model Coordinates	Poly's coordinate space is right-handed (+Z is the front of the object).	N/A	Object forward aligned with Z+, up aligned with Y+	N/A	Forward vector of object is along Z axis (if you expect it to face forward)	N/A
Texture Tiling	N/A	N/A	No tiling	N/A	N/A	N/A
Draco Compression Supported	N/A	Yes	No	Yes	N/A	Yes

NOTE: Wayfair does not have external documentation on AR - it seems to be an internal process. All external documentation is for creating 3DS Max files with V-Ray materials. We should be in contact with them directly.