

UV2 3D Model Requirements for an Enterprise 3D Content Pipeline

UVs

Check each requirement:

- 3D models should contain evenly unwrapped UVs with no obvious warping, pinching or stretching
- All UVs should fit into the 0:1 space with no overlapping UV shells
- All UVs should be oriented so that vertical grain texture maps match the product grain direction

Polycount / UV Vertices

Select one:

- 3D model is under 60,000 UV vertices
- 3D model is over 60,000 UV vertices
Products needing additional detail (e.g., seating with deep wrinkles) can reach up to 250,000 UV vertices if the product is split into submeshes with each mesh under 60,000 UV vertices.)

Materials

- Default materials (with no linked textures or material properties) should be applied to the individual elements within the product

(e.g., A wood table with a marble top would be one single mesh with a solid color M_0_0 material applied to the legs and a M_0_1 material applied to the tabletop).

Textures

- Textures are seamlessly tiling
- Textures have a resolution of 2048 x 2048 pixels or greater
- The texture grain direction should be vertical
- Check that Albedo, Metallic, Glossiness, and Normal texture maps are in 8-bit .tga format.

Format & Scale

- FBX (binary) is our preferred file type (we accept some others)
- Models should be exported with Y-up in meters with scene units set to meters

Modeling

- Models should be combined into one mesh (except products with glass or stitching)
- Smoothing normals should display as expected.
- Ngons (faces with more than 4 sides) are undesirable.

Orientation

- Products should be forward facing and positioned at 0,0 with the bottom of the product on the ground plane
- Freestanding products (e.g., sofas, coffee tables, lamps, etc.) should be centered at 0,0
- Products positioned along a wall (e.g., TV stands, consoles, etc.) should have the back of the product at 0,0

Pivot Point

- The pivot point on a freestanding product (e.g., sofa, table, lamp) should be bottom/center and located at 0,0.
- Floor products positioned along a wall (e.g., TV stands, consoles, etc.) should have a bottom/back/center pivot point located at 0,0.
- Wall mounted products (e.g., mirrors, art, etc.) should have a back/middle/center pivot at 0,0.

Performed by: <technician>

Date/Time:

Verified by: <manager or person in charge of process>