

Create a Sim Technical Test Criteria

Sul Sul! We're excited you want to make great content for The Sims 4. We look forward to seeing your ideas and assets. To help you successfully pass the Criteria Test, we've put together a checklist guide with examples, so that your asset will successfully load and be seen as intended.

What you'll find in this guide

- Software Requirements
- Common Term Definitions
- File Structure Checklist
- Modeling Checklist
- Texture Checklist

Please note that **two assets that meet the below criteria**, are required for the technical evaluation.

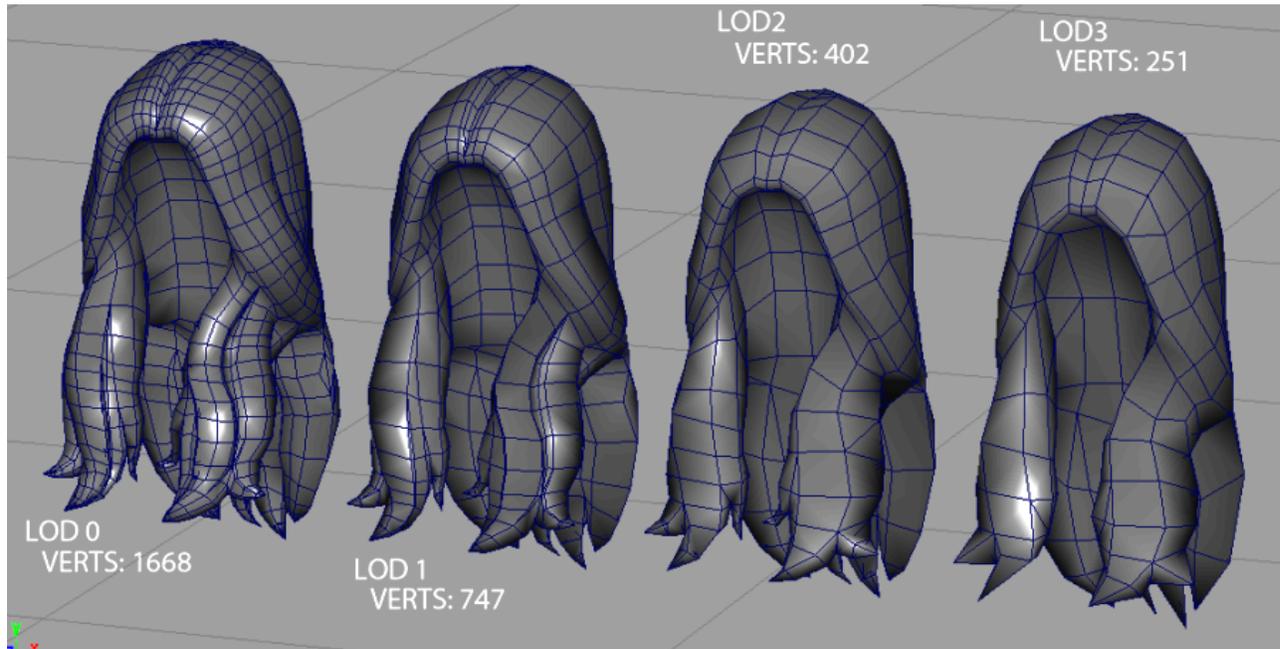
Software Requirements

- Ability to generate 3D models into a .fbx file.
- Ability to generate .tga and .psd files.

Common Term Definitions

- **Diffuse map** - A texture map that contains color and shading information, such as highlights, shadows, AO, etc.

- **LOD** - Level of Detail, or the number of poly faces in a 3D Mesh object.
 - **LOD0** - Highest polycount. Used for close-up view.
 - **LOD1** - 30% of the polycount of LOD0. Used for viewing from a short distance.



- **Normal map** - A texture mapping technique used for faking the lighting of bumps and dents – an implementation of bump mapping. It is used to add details without using more polygons.
- **Occluders** - Planes that cast shadows from a light source on floors and walls.
- **Poly Planes** - Individual faces that make up the 3D model
- **Snow mask map** - A variation of the diffuse map that shows what the object looks like if it was covered in snow.
- **Specular map** - determines the shininess or reflectivity of an object in 3D. It's used in conjunction with a diffuse and normal map to enhance the realism of the object's texture. **Do not use gradients.** Only flat values of grayscale.
- **Tris** - Triangular Poly Plane. Tri's (triangles) can be used to break up an n-gon (5 sided plane) or when trying to avoid shading issues on the mesh.
- **Quad / Poly Plane** - A 4 sided Poly Plane. This equals 2 Tris in your LOD Polycount. Aim for modeling using quads/Poly Planes where possible.

Checklist Overview

File Structure Checklist

- Mesh File Format is .fbx or .ma
- Files are Named Appropriately

Modeling Checklist

- The Mesh is Well Constructed.
- CAS Asset Renders as Expected
- CAS Triangle Targets

Texture Checklist

- PSD file is Setup Correctly
- Texture Files are Correctly Sized

File Structure Checklist

Mesh File Format is .fbx or .ma

- Save your 3D Model mesh as .fbx or .ma.

Files are Named Appropriately

To create your **AssetName** for your CAS Part, combine the **BodyType**, **Clothing Type**, and a **Short Descriptor** that is **NOT** a color. **Camel Case** is encouraged.

For example: yTopGraphicTee, mBottomDenimShorts, fNecklaceBohoBeads

Body Type:

- Y = Youth
- M = Masculine
- F = Feminine

Clothing Types:

- Top
- Bottom
- FullBody
- Coat or Robe
- Shoes

- Hat
- Glasses
- Gloves
- Necklace
- Bracelet
- Sock

Once you have your **AssetName**, please structure your folders and files as below:

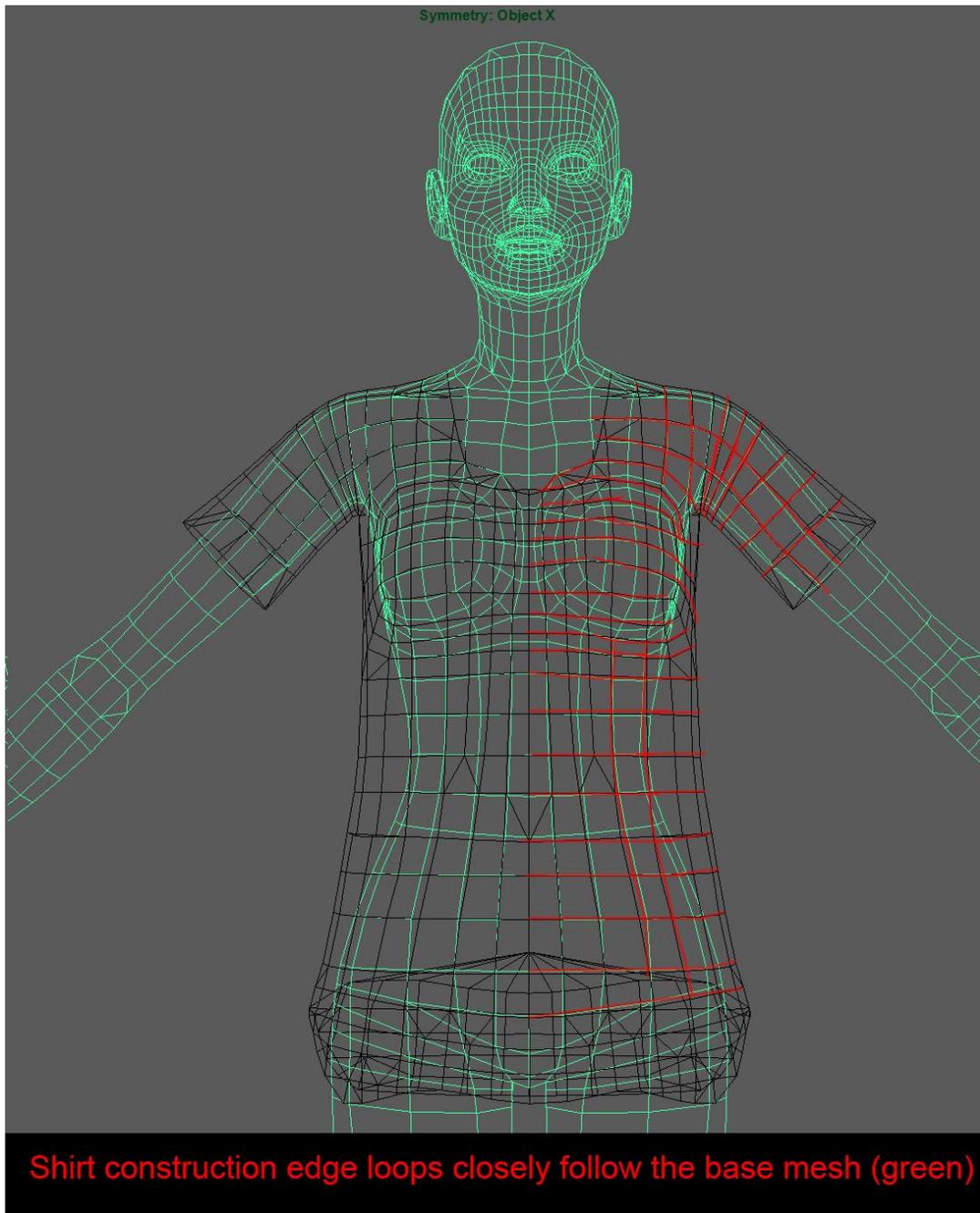
-  A Root folder: [CreatorName]
-  Asset Folder: [CreatorName_AssetName]
 -  .fbx or  .ma File [CreatorName_AssetName]
 - Geo Mesh Outliner for LOD0: <CreatorName_AssetName>_LOD0
 - Geo Mesh Outliner for LOD1: <CreatorName_AssetName>_LOD1
 -  .psd File [CreatorName_AssetName].psd
 -  .tga File Normal Map [CreatorName_AssetName_n].tga
 -  .tga File Specular Map [CreatorName_AssetName_s].tga
 -  .tga File Shadow Map [CreatorName_AssetName_sh].tga
 -  .tga File Diffuse Color Map Variant 1 [CreatorName_AssetName_colorVariant1].tga
 -  .tga File Diffuse Color Map Variant 2 [CreatorName_AssetName_colorVariant2].tga
 - .package file (your asset as a mod)

Modeling Checklist

The Mesh is Well Constructed.

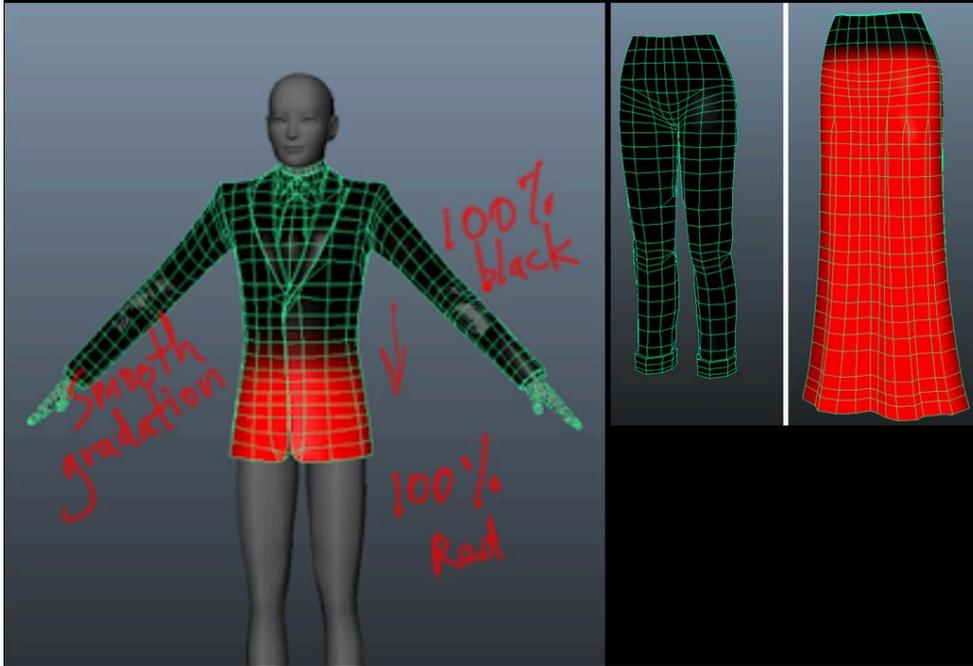
- Before Submission, please **REMOVE** any templates or assisting artifacts used for the creation process. We want to review only your work on the finished asset, and you must have rights to any data submitted in the 3D modeling file.
- Face Normals are outward facing.
- Vertices are merged, there's no collapsed polygons, no 5-sided concave polys, and no laminar faces.
- It is recommended to line up the asset's edge loops with the base model's edge loops.

Example:



Color the Vertices to indicate **close fitting (black)**, or **loose fitting (red)**.

Example:



CAS Asset Renders as Expected

How to test:

- Create a .package file of your CAS asset feel free to use whatever workflow or 3rd party tools you are familiar with.
- Add this .package file to your Mods folder under **My Documents > Electronic Arts > The Sims 4 > Mods**
- If any visual issues occur when applying the content to the Sim.
- How the asset performs on different CAS body frames and skin tones.
 - Push and pull the body frame to check for any clipping or weird geometry effects
- How the CAS asset stacks with other clothing items. For example:
 - Check bracelets, rings, necklaces, nails, shoes, and hats do not have any undesired effects.

- If the clothing deforms smoothly over the body.



CAS Triangle Targets

It's ok to go over by up to 10%, but please keep it below the limit when possible. Please follow the polygon counts provided below:

Clothing Type	LOD0 Count	L0D1 Count
Bottoms	1100	770
Full Body	4200	2940
Shoes	350	245
Tops	200	140
Hats	1200	1000

Hair	4000	2500
Nails	1000	800
Earrings	1200	800
Necklaces	1200	800

Texture Checklist

PSD File is Setup Correctly

- Do not flatten the layers.
- Use layer masks and gradients to make color variants.
- Keep the highlights and shadows layers separate.
- When making textures with alpha, please ensure that those are saved with the alpha channel (32-bit) in the .tga file.

Texture Files are Correctly Sized

- **Diffuse Color Map:** 1024 x 2048 (32 bits)
- **Normal Map:** 1024 x 1024 (24 bits)
- **Specular Map:** 1024 x 2048 (32 bits)
- Textures should be saved as .tga Targa files. All maps, except the **Normal Map**, should have alpha channels and 32 bit resolution and the Compress (RLE) option box checked. **Normal Maps** don't need an alpha channel and should be saved at 24 bit resolution with the Compress (RLE) option box checked.

