

**E.D. FILMS**

**PSD to FBX User Manual 2021**

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# Getting Started

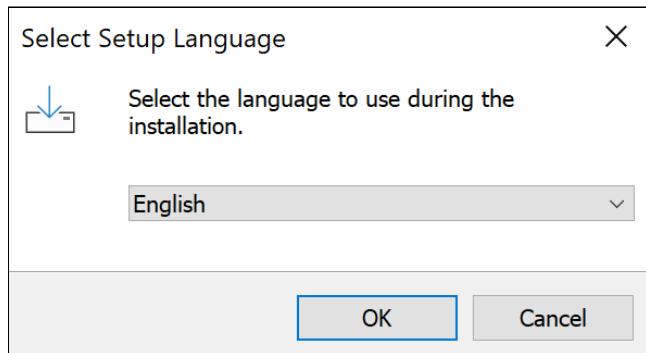
## Installing PSD to FBX on Windows

### 1. Run the Installer

The PSD to FBX Installer will guide you through the installation process.

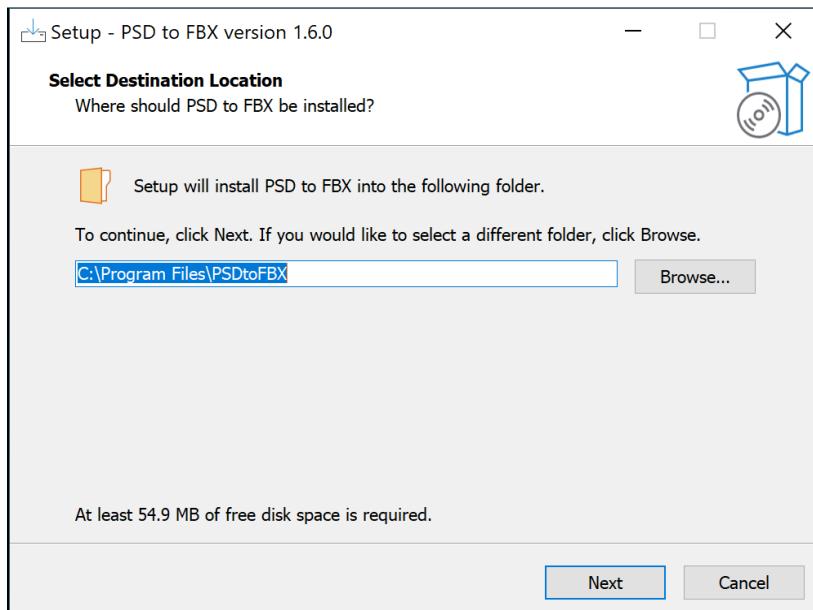
### 2. Select what language you want to install

Currently the language options for running PSD to FBX include English and French.



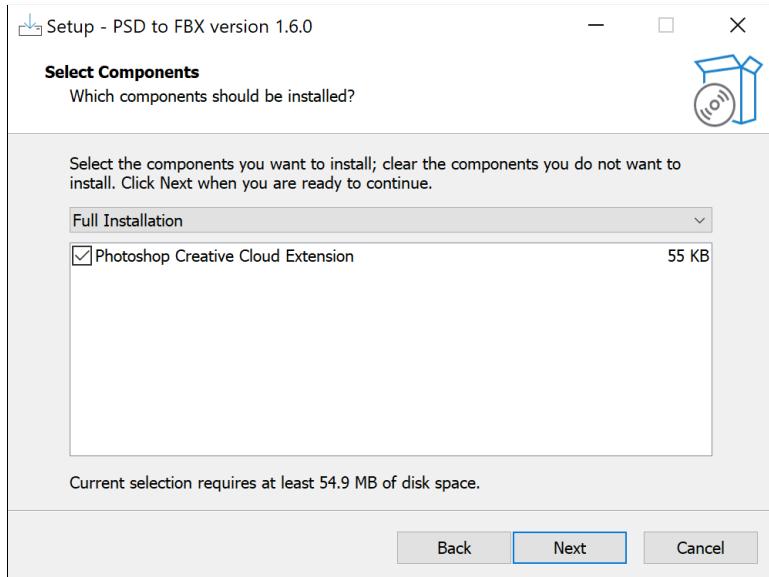
### 3. Select Destination Location

By clicking on the Browse button the user can choose which folder they wish PSD to FBX to be installed.



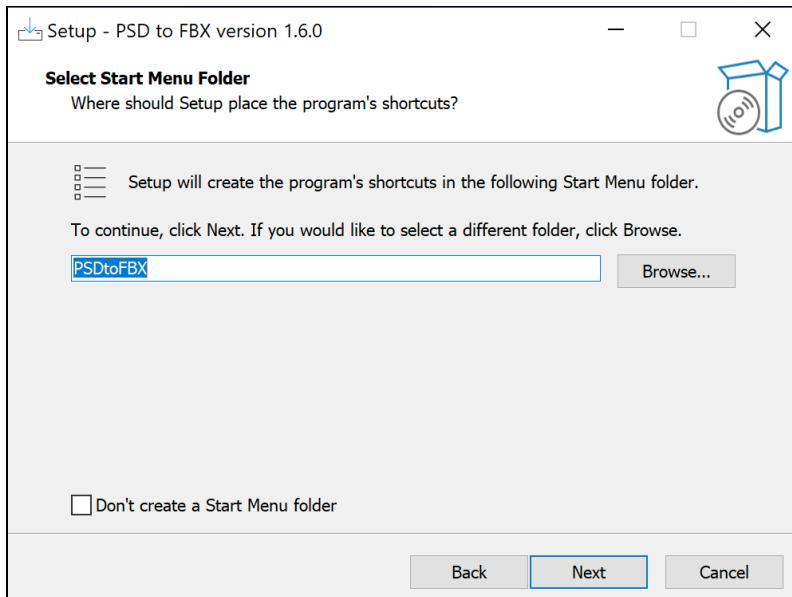
#### 4. Select Components

Here the user can select whether or not they want to install the Photoshop Creative Cloud Extension. By default it is selected.



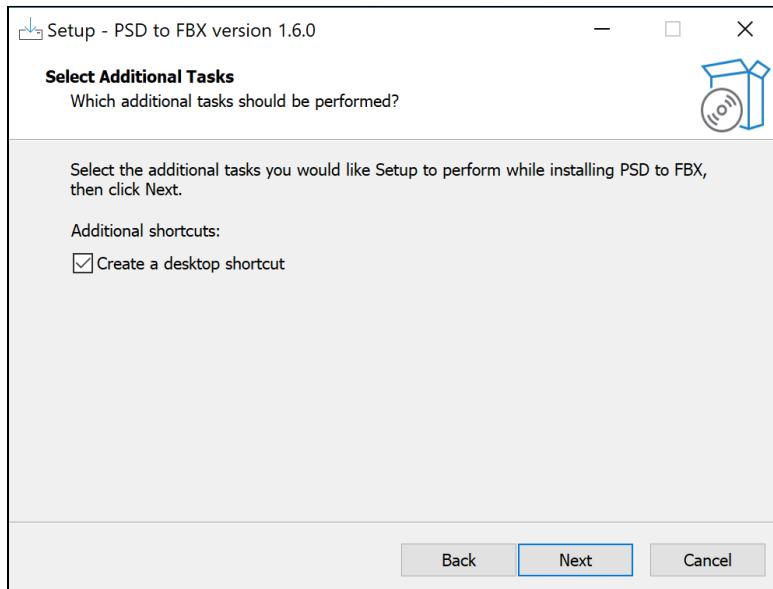
#### 5. Select Start Menu Folder Location

By clicking the Browse button the user can choose which Start Menu Folder they wish PSD to FBX's shortcut to be displayed.



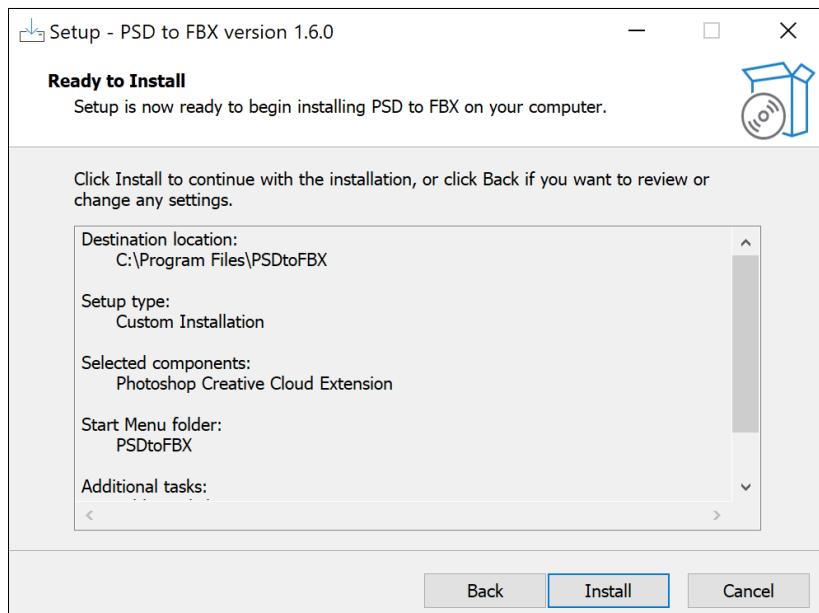
## 6. Select Additional Tasks

By clicking the checkbox in the Additional Tasks box below, a desktop shortcut will be created for easy access to the application.



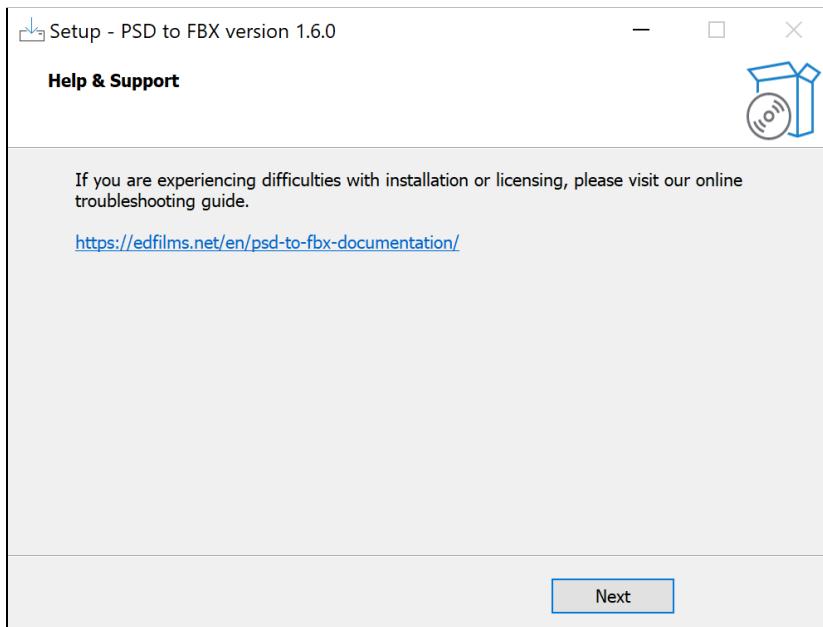
## 7. Ready to Install PSD to FBX

The information displayed is a summary of all the choices the user has made for the installation.



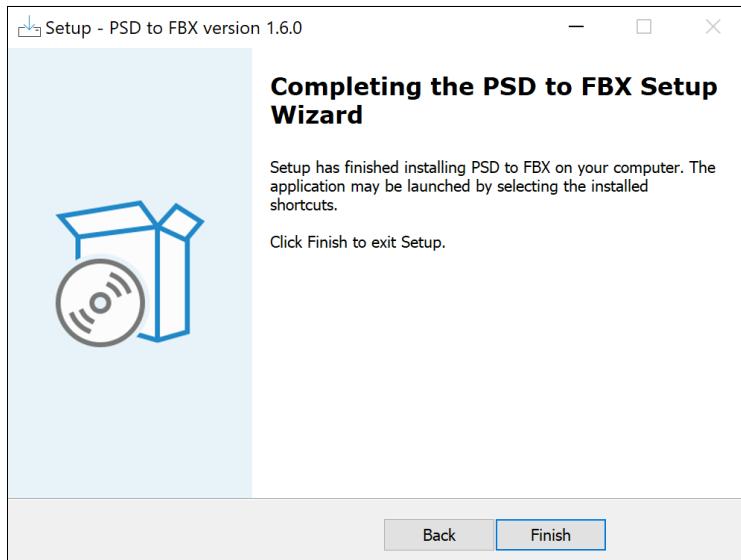
## 8. Consult Link for all Known Issues with PSD to FBX and best practices

By clicking on the link in the Help & Support window the user will be directed to a webpage housed on EDFilms' website that displays all known issues related to the tool's latest build, as well as any possible workaround solutions for dealing with those issues.

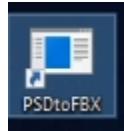


## 9. Finish Installation

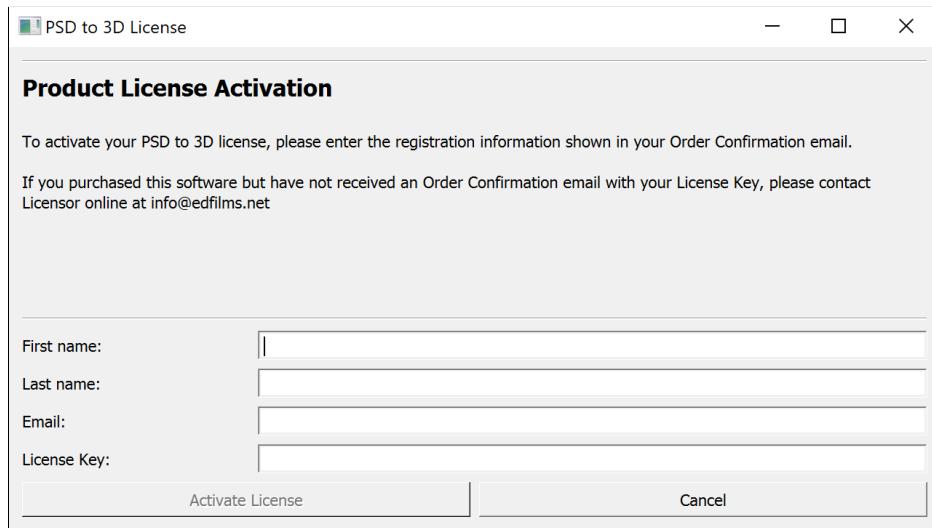
By clicking the Finish button the PSD to FBX installation will complete.



## 10. Locate PSD to FBX Shortcut on Desktop or in Start Menu and Run Application



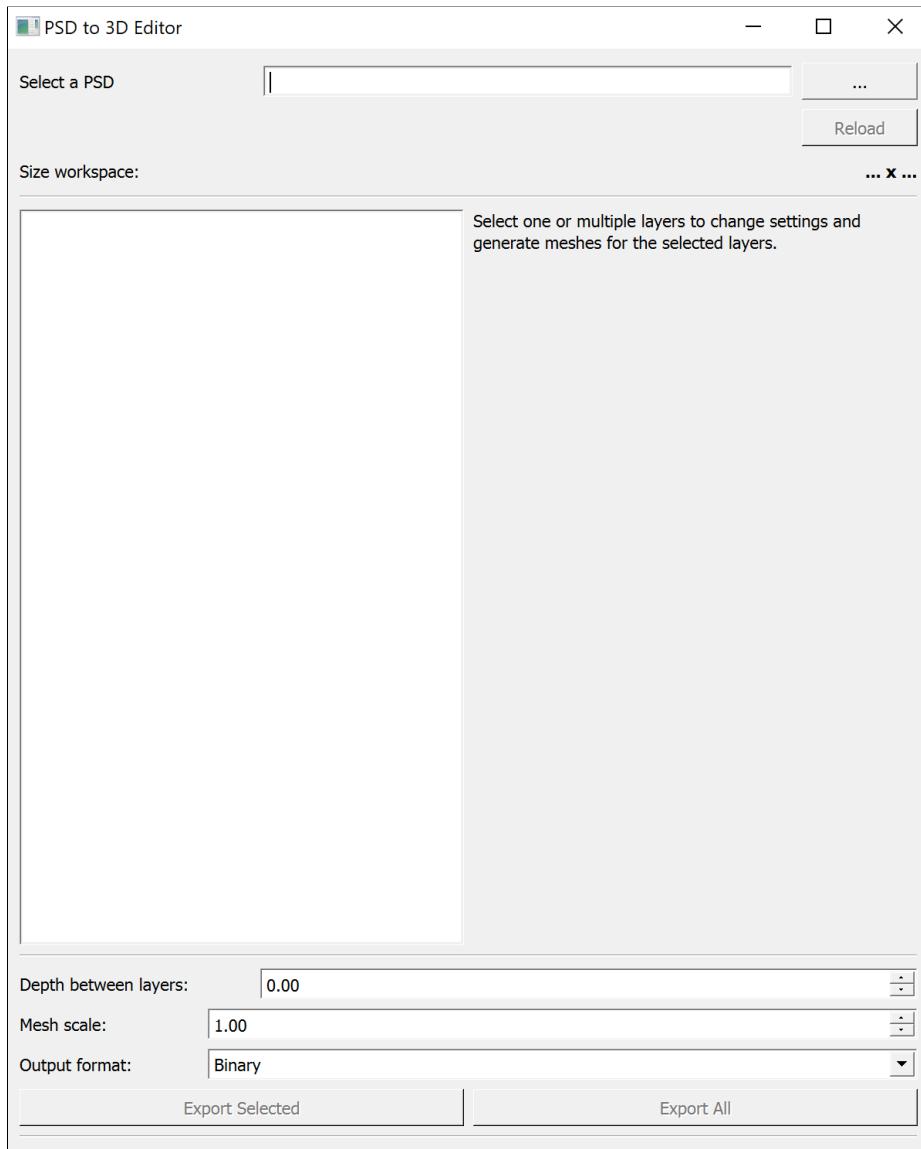
## 11. Activate License of PSD to FBX



## 12. Locate EDFilms Purchase Confirmation email for License Key information

A screenshot of an email from E.D. FILMS. The subject is 'Thank you for your purchase.' The body of the email contains a message about download links and support from the Canada Media Fund. It includes a 'Billing Info' section with a QR code and a 'Your download links' section where a link for 'PSD to FBX' is highlighted with a yellow box. Below this is a 'Resend Download Links' button. The 'Order' section shows a breakdown of the purchase: PSD to FBX plugins for \$100.00, Taxes for 15.00, and a Total of \$115.00.

## 13. Run PSD to FBX fully licensed



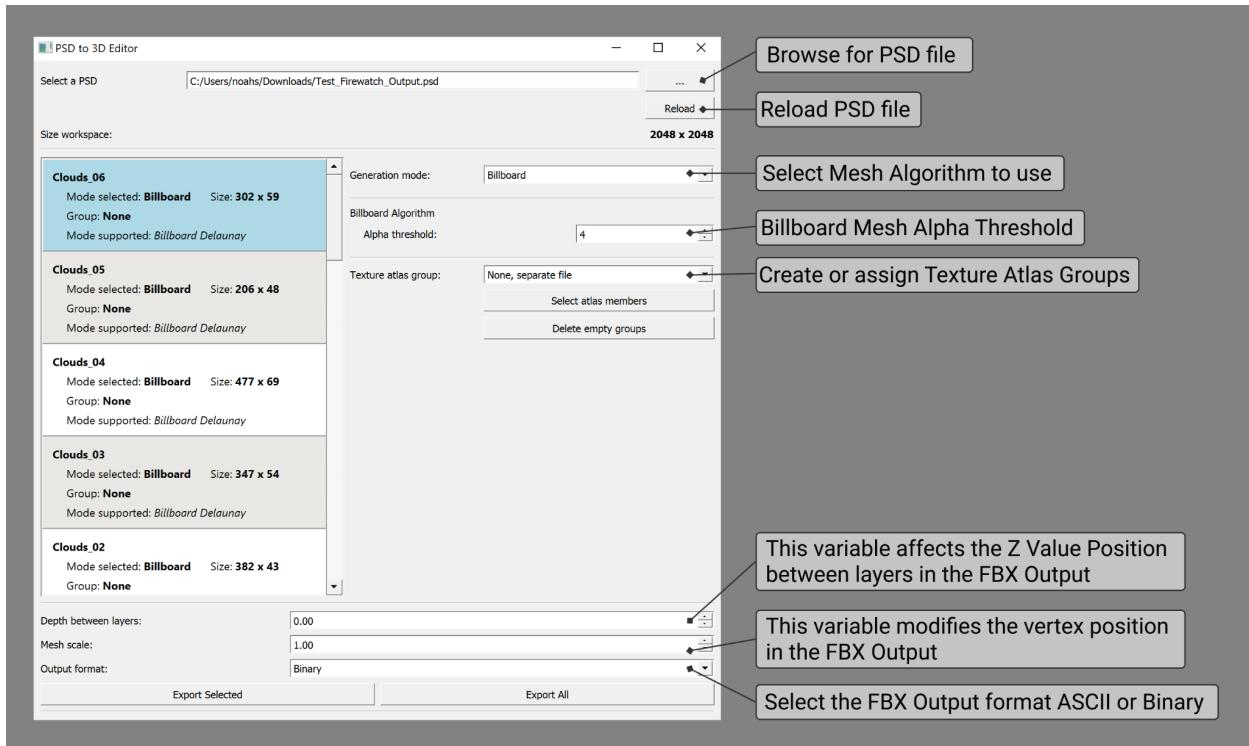
## 14. Quick Start

1. Select your PSD file
2. Set generation mode for each layer
3. Change generation settings to best suit your needs
4. Create texture atlas groups
5. Set export settings
6. Choose export location
7. Export your meshes and textures!

# PSD to FBX User Interface

## Billboard Mode

**Billboard** mode is the most basic solution and suitable for many uses within a 3D project, especially for geometry that is not intended to be sculpted or deformed. The size of the billboard is determined by the alpha plus an alpha **Threshold** and **Expansion** setting defined by the user. This will ensure that the billboard captures all of the desired detail of the layer without including unwanted, semi-transparent pixels. A disadvantage of this mode is that it may require extra draw calls due to a high number of transparent pixels in irregularly shaped layers.



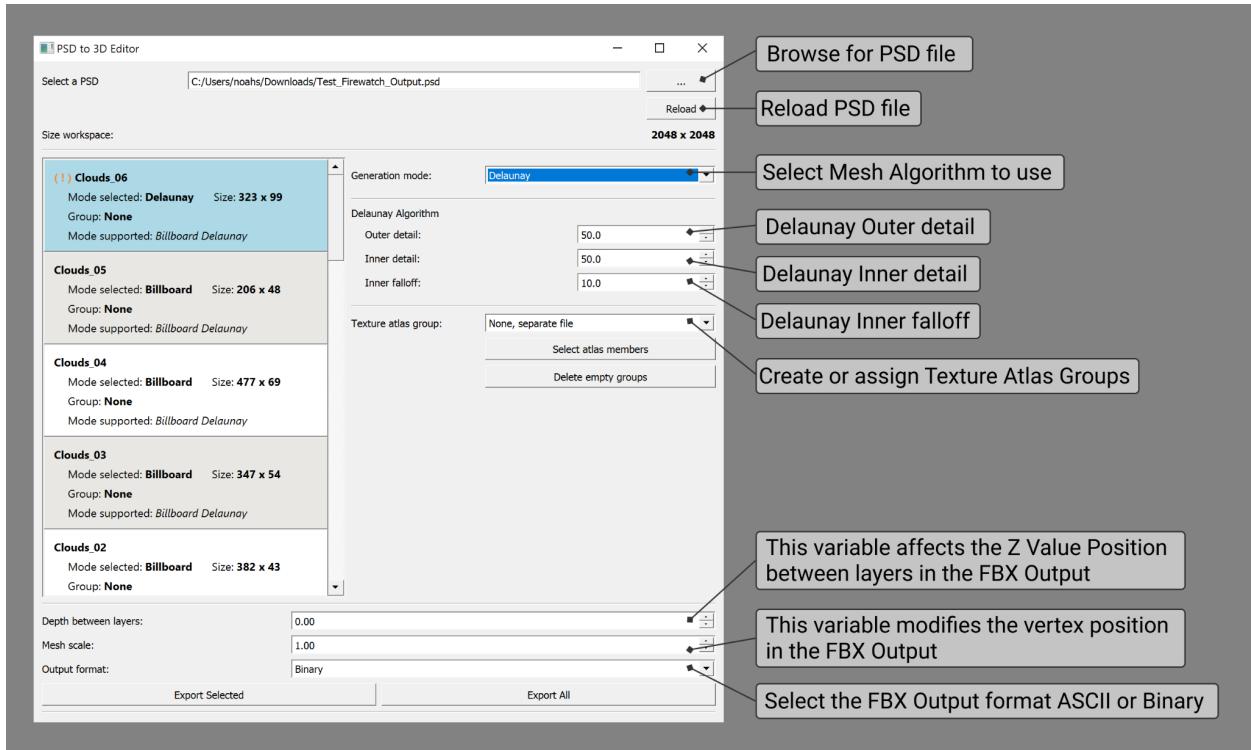
## Delaunay Mode

**Delaunay** triangulation is one of the most exciting mesh generation modes available. This is very similar to the mesh algorithm found in After Effects Puppet Tool or Photoshop's Puppet Mesh tool only with cleaner edge loops. This makes for better quality mesh deformation when rigged, skinned or sculpted. We include four main parameters including **Outer Detail**, **Inner Detail**, and **Inner Falloff**.

**Outer Detail** affects the number of vertices along the perimeter edge of the mesh. Higher values produce a denser mesh.

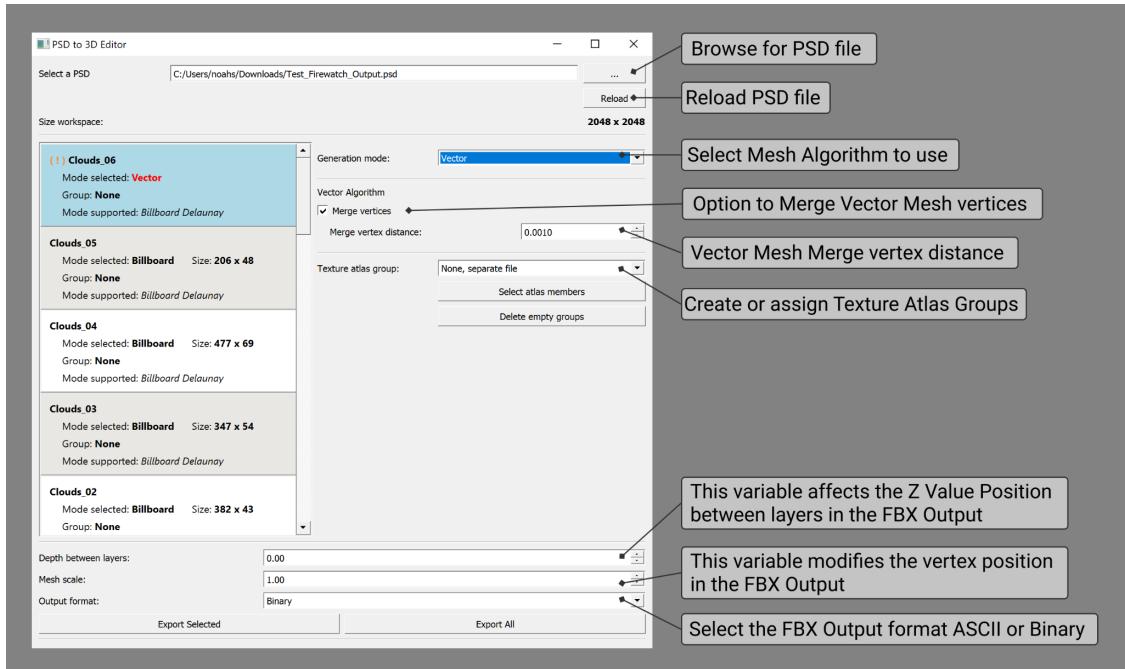
**Inner Detail** affects the number of vertices along the interior of the mesh. Higher values produce a denser mesh.

**Inner Falloff** reduces the number of vertices towards the center of the mesh; the perimeter is unaffected. Higher values reduce the overall density without sacrificing edge detail. Set to 0.0 to disable.



## Vector Mode

Vector mode uses vector curves drawn on the layer, typically in Photoshop using the pen tool, for generating the meshes. A closed bezier curve is defined for the perimeter and vector lines; closed loops or shapes can be added within it to add more detail to the mesh. A more experienced user can quickly block in the geometry's primary edge flow before refining it further and adding detail within Unreal. A Merge vertices function helps keep geometry clean by merging vertices together within a specified range down to a single vert.

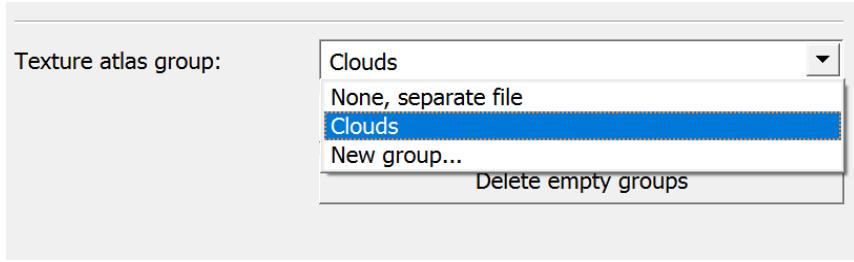


## Conclusion

It isn't necessary to choose only one mode for the entire PSD file. Each layer can use the geometry generation algorithm that best suits the piece. For example, an artist may choose to use Vector Mode for the face of a character so they can have more effective animated deformations while using Delaunay for general forms that need less precision. Finally billboard mode may be used for objects that will not be deformed such as sprites, flat background pieces, non-skinned elements or simple rigid structures.

## Texture atlas

After defining the Mesh generation mode, layers can be grouped into 1K,2K,4K and 8K texture atlases for effective material management and optimized texture memory. The Atlases are managed via a simple drop down menu and text entry field used for creating new maps. The Atlas texture map size is determined by the amount of pixels the art assets take up when expansion and alpha threshold are taken into account



## Mesh scale/depth between layers

The final step before exporting the PSD files is setting the Mesh scale and adding some space between layers, if desired. This essentially determines how large the geometry will be in the scene compared to other geometry and will add an additional space between the layers so that they can be more easily selected and managed. Additional final options will include centering geometry pivots, keeping geometry separate or unifying the mesh, etc.

Depth between layers:	0.00
Mesh scale:	1.00
Output format:	Binary
Export Selected	
Export All	

## Exporting

The user has the option to either export just the selected layers, or all layers present in the PSD file. After pressing export a file dialog allows the user to select where they want the files to be saved. The FBX file will be exported along with the PNG texture atlases. An export popup window displays the export process and indicates when the export is complete.

# Using PSD to FBX

## Known Issues & Solutions

- 1. FBX export overwrites the previous file, instead of incrementing the file name**
  - Currently PSD to FBX does not support file version incrementation. It will write an FBX file named after the PSD file, with no version number appended. If version history is required, manually copy and rename the FBX file after export.
- 2. Textures with power-of-two size (1024,2048..) do not pack evenly into an atlas**
  - Each atlas island is surrounded by a few pixels of padding to ensure that no color bleed is visible along the texture edges. As a result, texture islands may be slightly larger than power-of-two and may not pack evenly into an atlas, which are always power-of-two size. It is recommended to use slightly smaller size layers (1020,2042..) in Photoshop, if perfect packing is desired from PSDtoFBX.
- 3. Output folder contains multiple small PNGs when only a single atlas is in use**
  - Currently PSDtoFBX exports both individual and atlas texture PNG files for each PSD layer assigned to an atlas. Other PNG files are secondary and may be deleted.
- 4. FBX export contains entire scene, even if only one layer is selected in PSDtoFBX**
  - Currently PSDtoFBX does not support an "export selected" option, and instead will always export each PSD layer to the FBX file during export.
- 5. Blender fails to import FBX file with error "ASCII FBX files are not supported"**
  - From PSDtoFBX, ensure the Output Format dropdown is set to Binary, instead of ASCII, before exporting.
- 6. FBX import displaying Alphas incorrectly**
  - Blender
  - Houdini
  - Maya
  - Softimage XSI
  - Unreal

## **Steps for fixing FBX textures in Unreal**

Import your .fbx file into the content browser

At first the material will appear incorrectly

To fix this double click the material to open material editor

Connect the Alpha channel from the Texture Sample into Opacity on the Shader

Your material should now appear correctly!

To save on processing power, or for large scenes we recommend that you change the material blend mode from Translucent to Masked

This will break the previously made connection, so instead you must connect the Alpha Channel to the newly available Opacity Mask

Because the Masked blend mode creates a purely opaque texture you might want to place a Dither node in between the connection to preserve any natural transparencies you might have had in your original file.

## **Steps for fixing FBX textures in 3ds Max**

Import the .FBX file using the File menu->Import->Import...

After the file is imported, the texture parameters will need to be updated. This can be done either through a manual or scripted approach, described below.

### I. Manual approach

For each imported texture, set the Bitmap Parameters->Mono Channel Output to Alpha.

This can be done as follows,

1. Select each imported object one-by-one, OR, select one object from each texture atlas group one-by-one, then ...
2. Open the Material Editor in Compact mode
3. Use the eyedropper to pick the material from the selected object
4. Click the Diffuse channel texture map button
5. In the texture map settings, in the Bitmap Parameters rollout, under Mono Channel Output, select the Alpha radio button

### II. Scripted approach

Select all imported objects and run the following script:

```
for obj in $selection do obj.material.diffuseMap.monoOutput =  
1
```

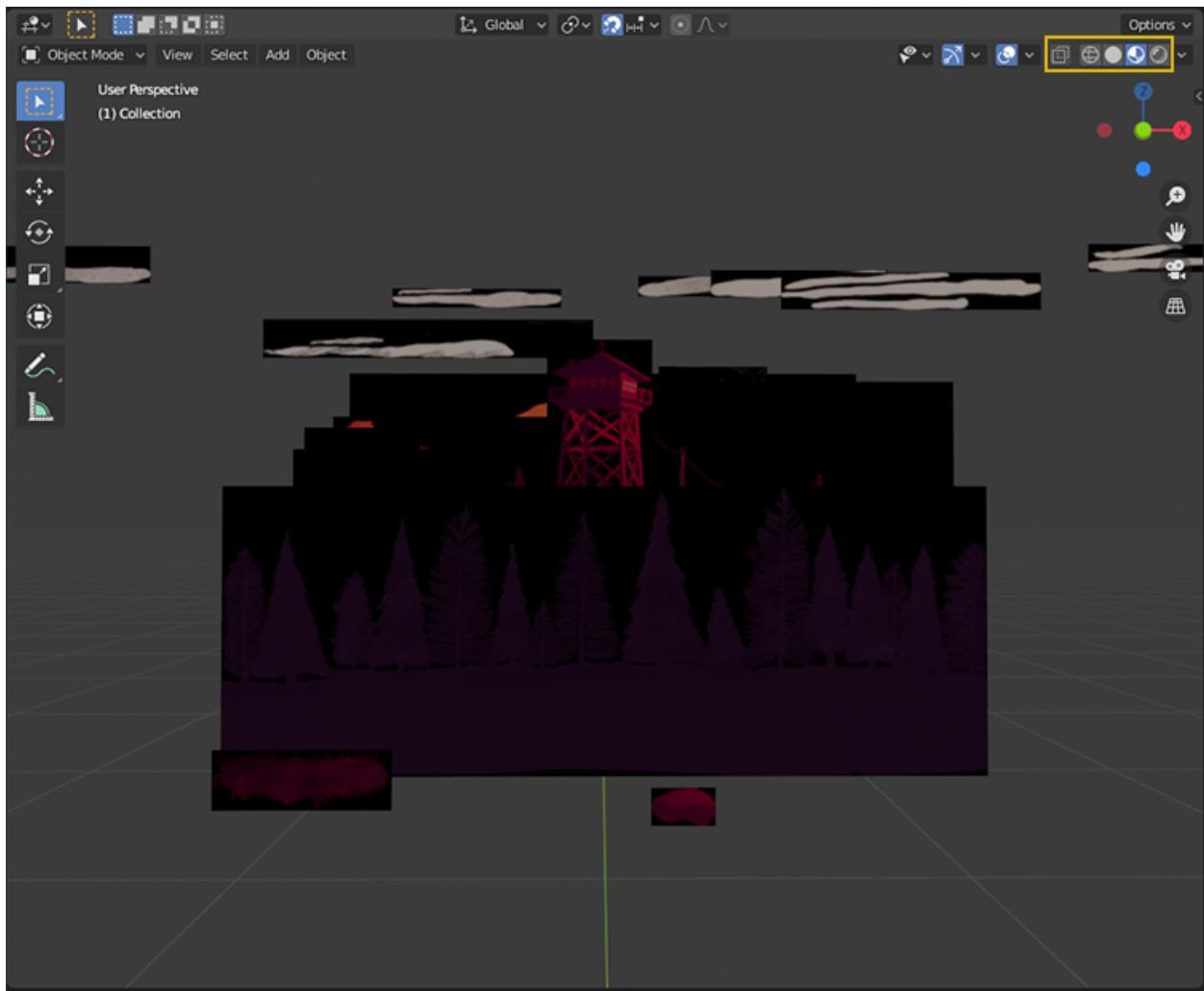
This can be done as follows,

1. Open the MaxScript Listener window from the Scripting Menu->MaxScript Listener

2. Copy the script into the **last line** of the lower (white) portion of the window
3. Move the cursor to the end of the line, and hit the **enter key on the numeric keypad**
4. If done correctly, the Listener will print out "OK"

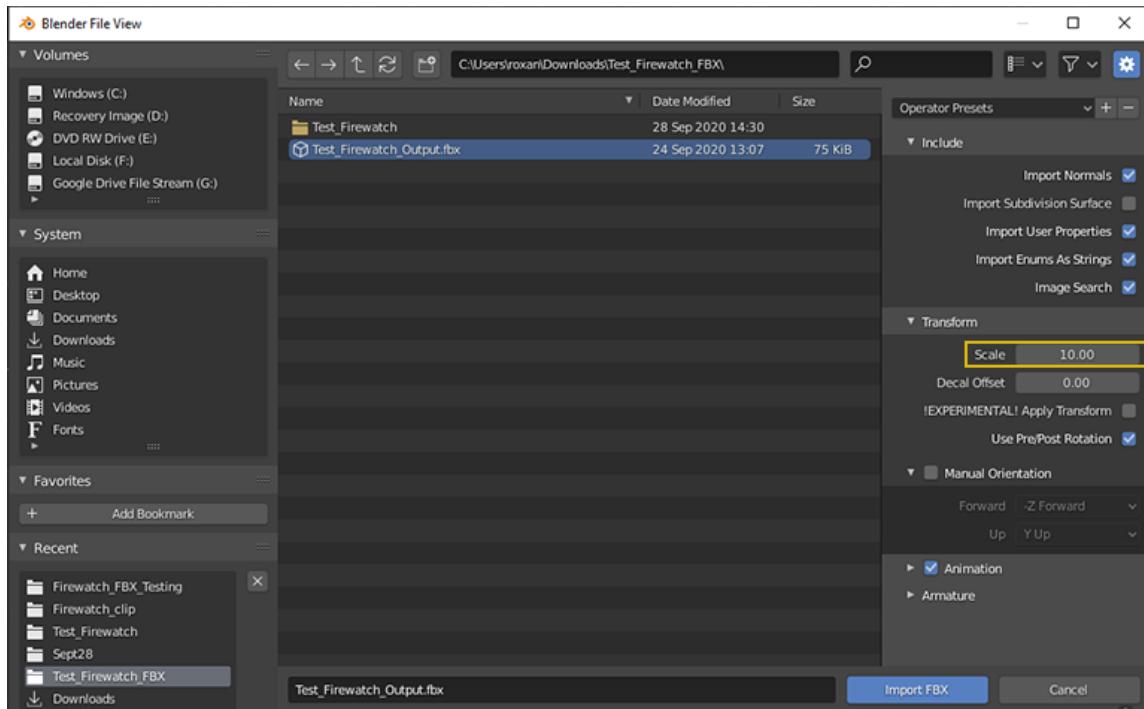
## Steps for fixing FBX textures in Blender

**Issue:** Blender, textures display incorrectly in viewport, wrong alpha (black fill). EV isn't recognizing the alpha channel and it needs to be set manually.



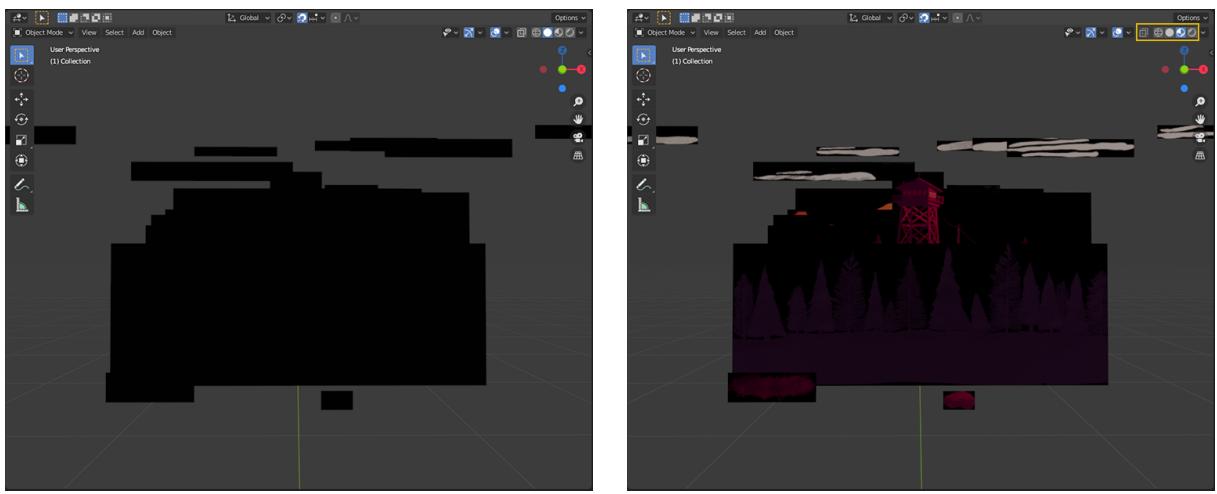
## 1. Import FBX file into Blender

Set world scale to 10, otherwise your FBX file will be very small.

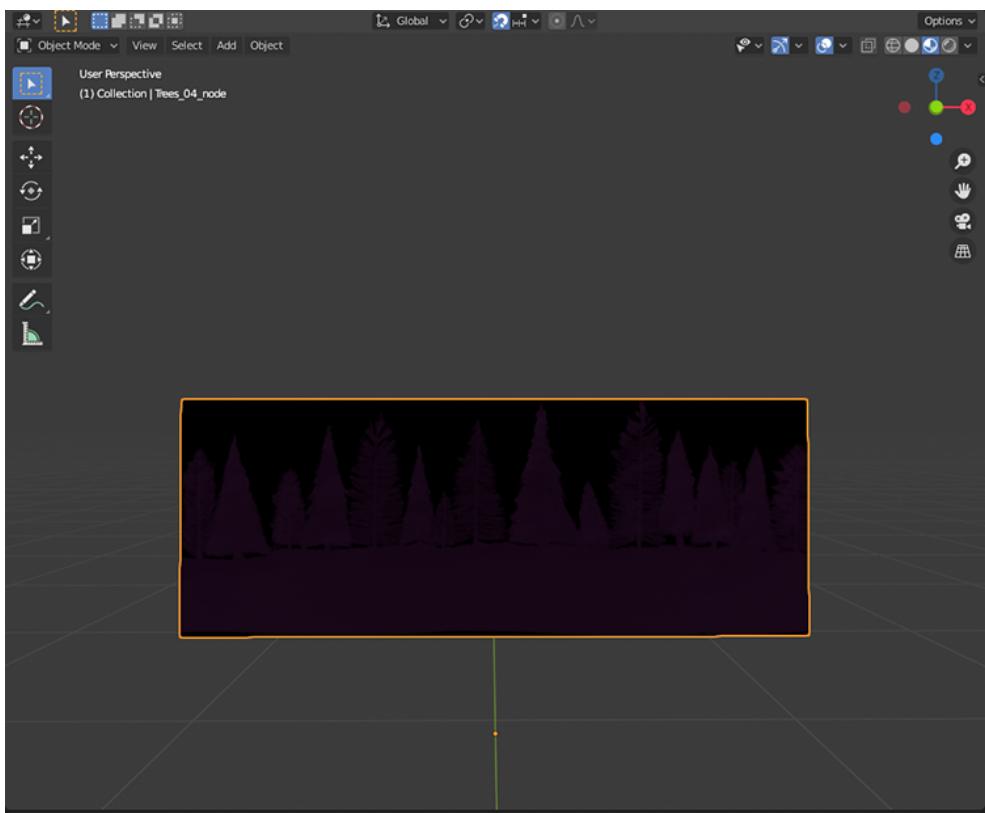


## 2. Select Material Preview Option in Viewport.

By default Blenders Viewport Display mode will be set to Solid.

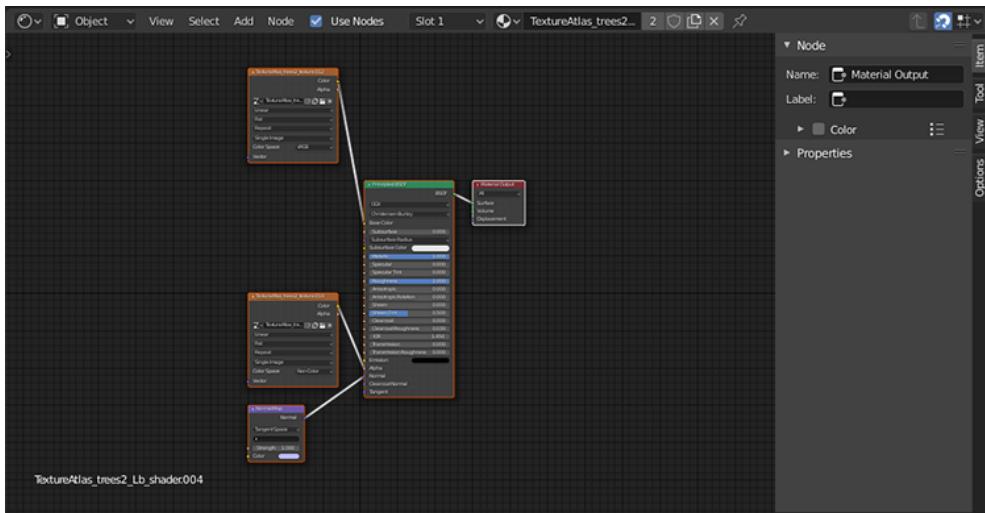


### 3. Select Object / Mesh.



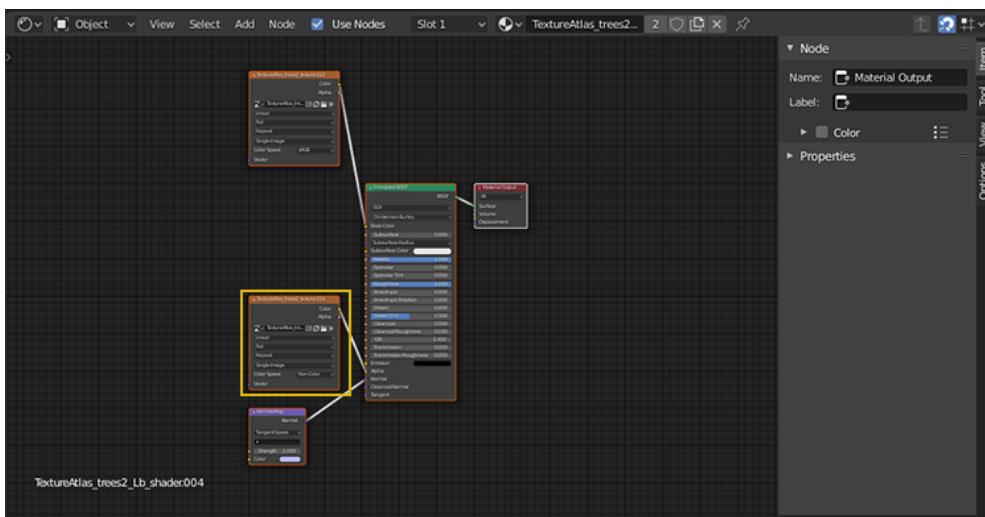
**4.** Open Shader Editor to view Texture Properties.

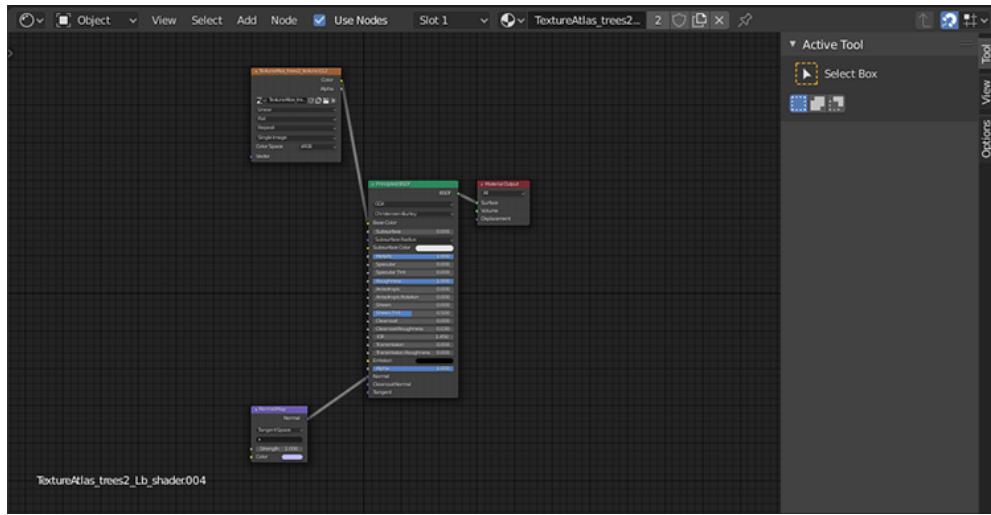
Create a new window and select Shader Editor to display all texture nodes relating to selected object.



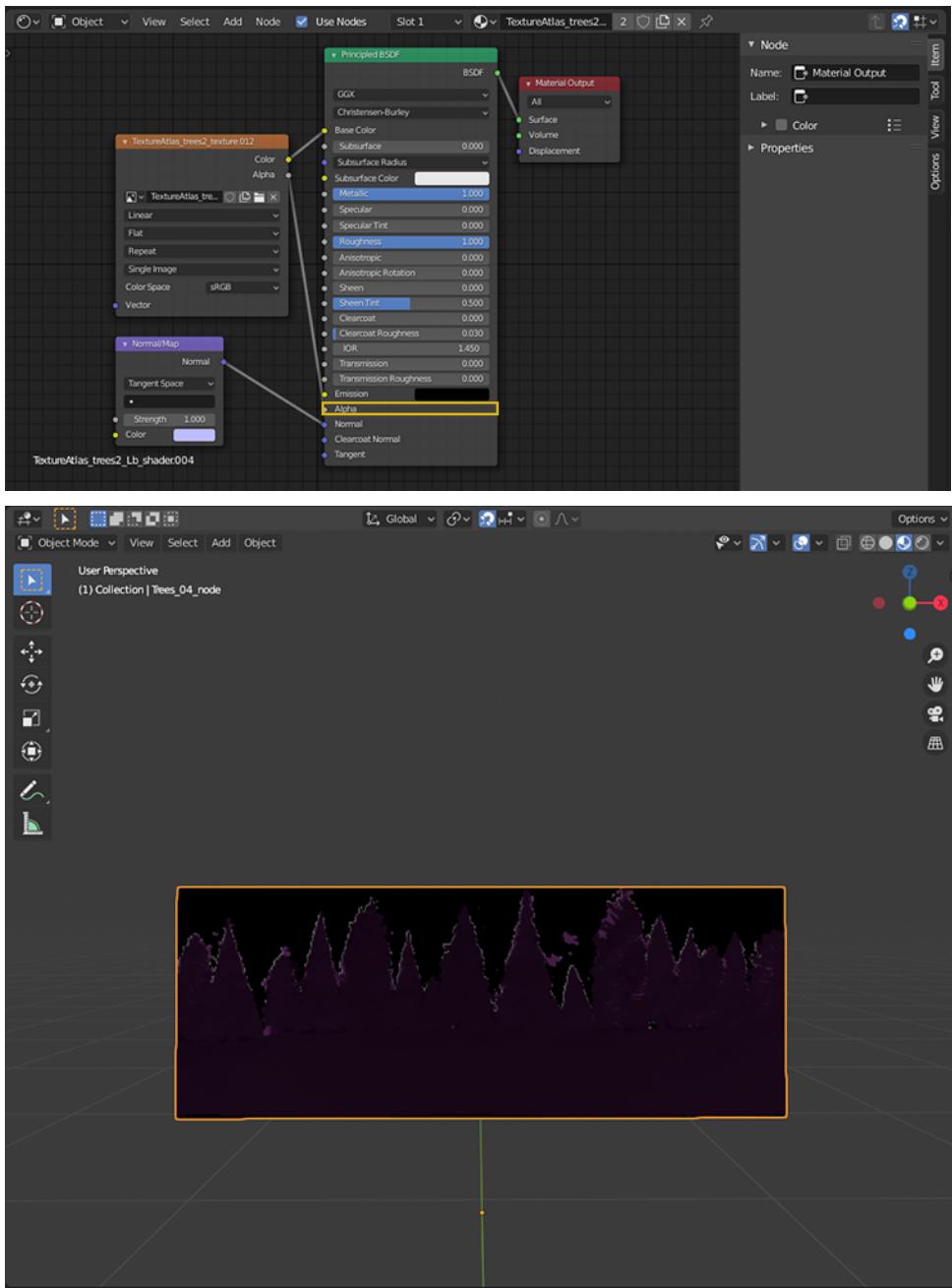
**5.** Delete extra texture node attached to Alpha.

When importing an FBX into Blender it assigns two different texture nodes to the shader which is why the alphas display incorrectly.

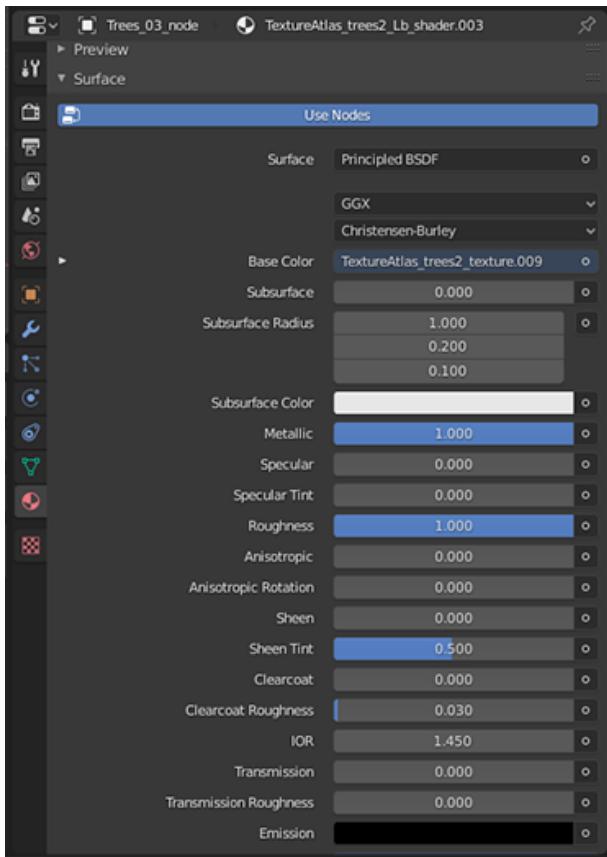




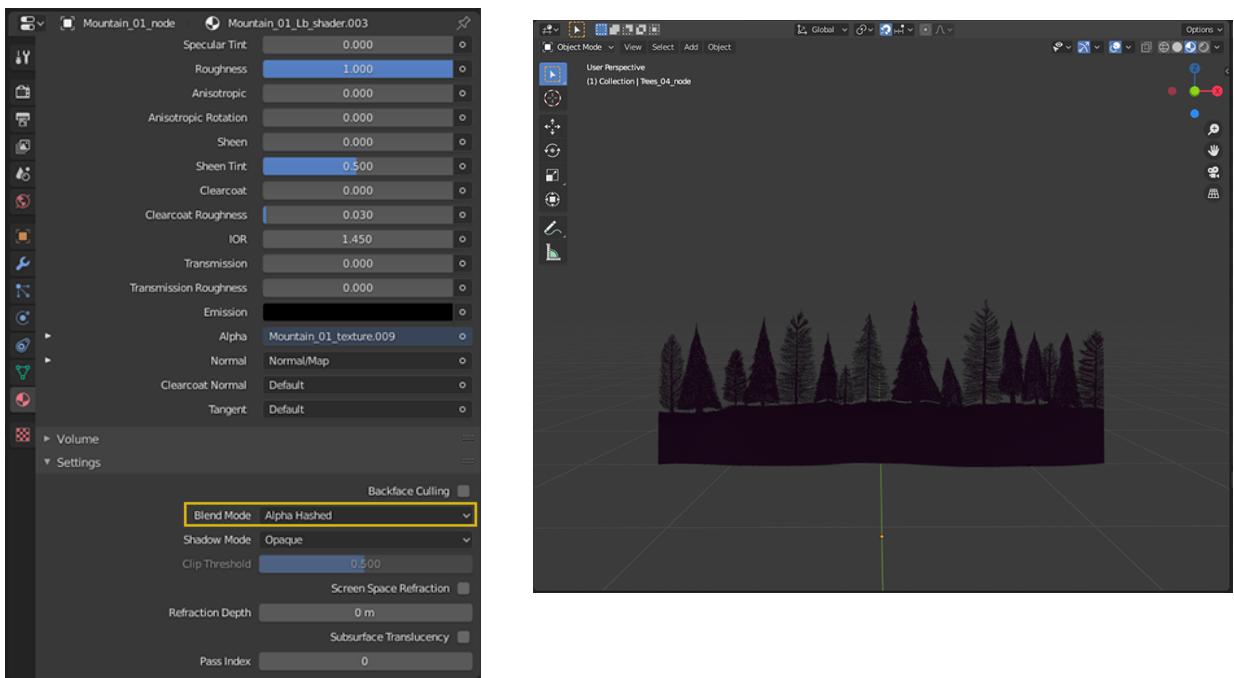
6. Attach alpha from the remaining texture node to the alpha input on the shader. Attaching the alpha node from the textures generated from PSD to FBX will ensure your alphas don't display as black fills. You will see a slight white fringing on the edges before taking the next step.



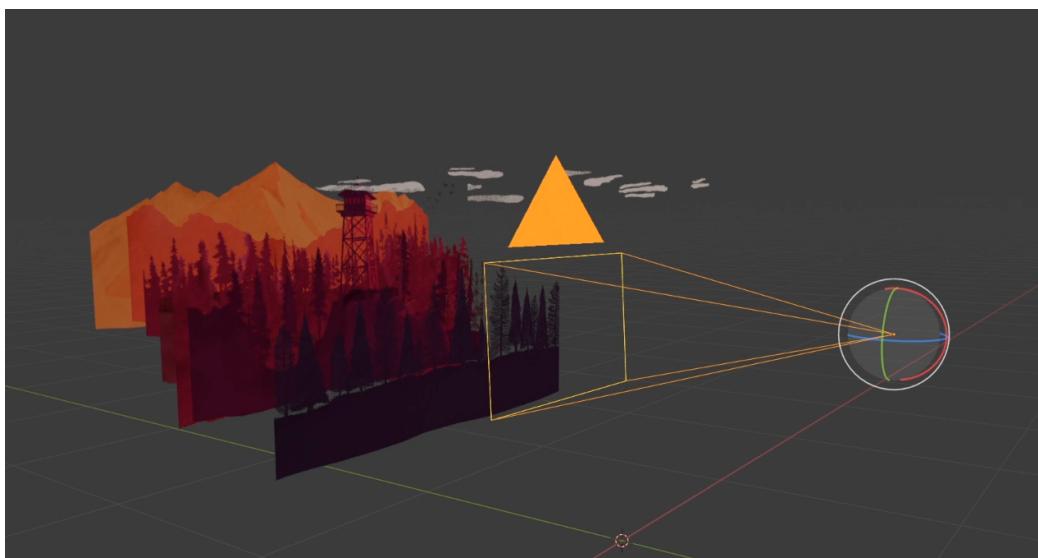
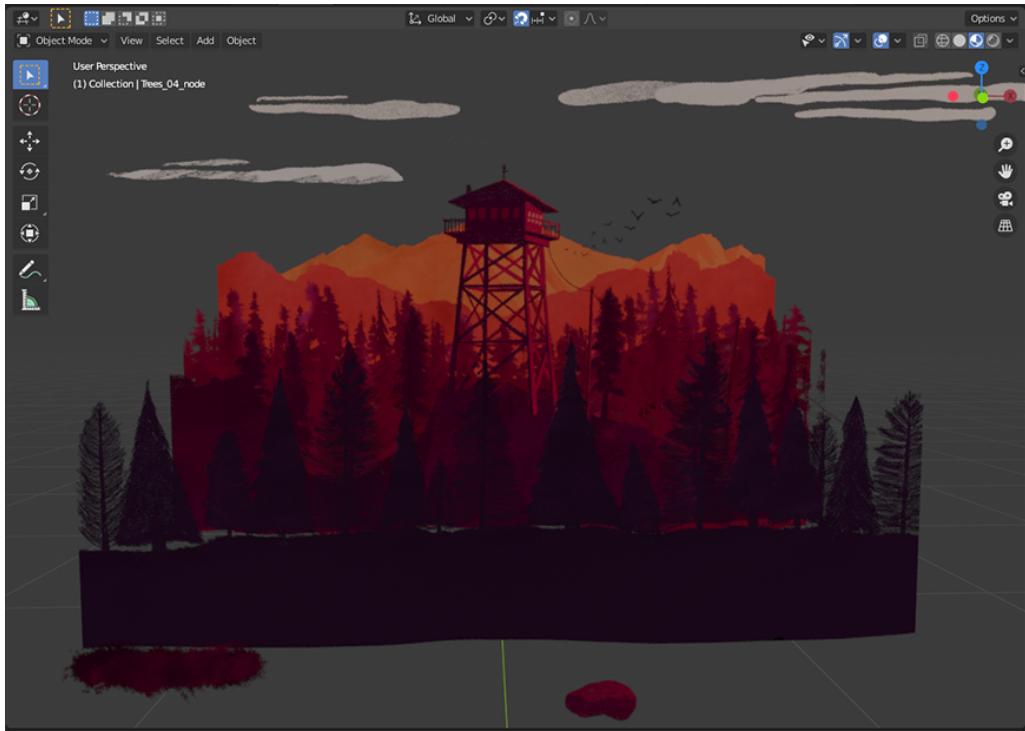
## 7. Open Material Properties Window to find more Shader properties



## 8. Under Settings locate Blend Mode and change to Alpha Hashed option.



9. Repeat steps 3-8 on all Objects to fix all Alphas.

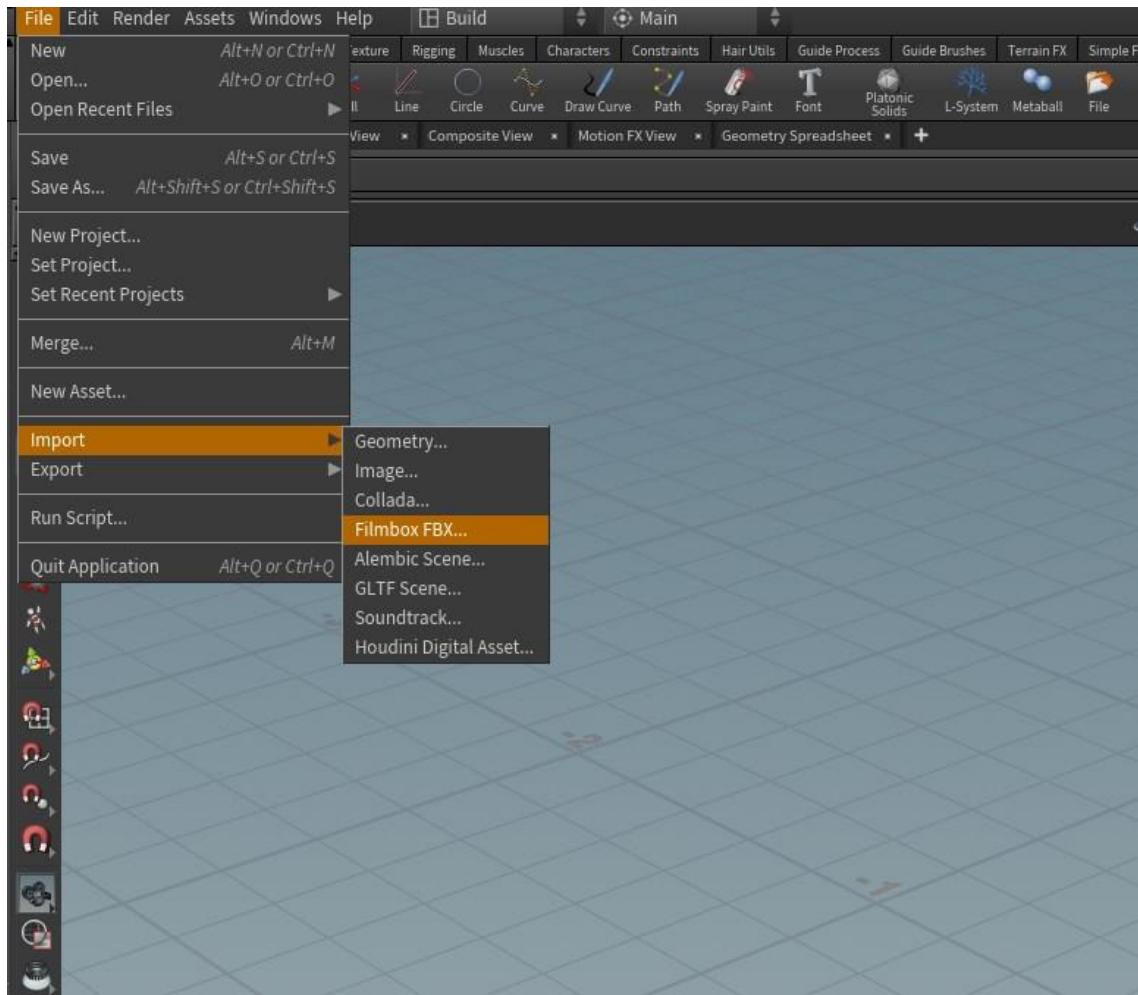


## Steps for fixing FBX textures in Houdini

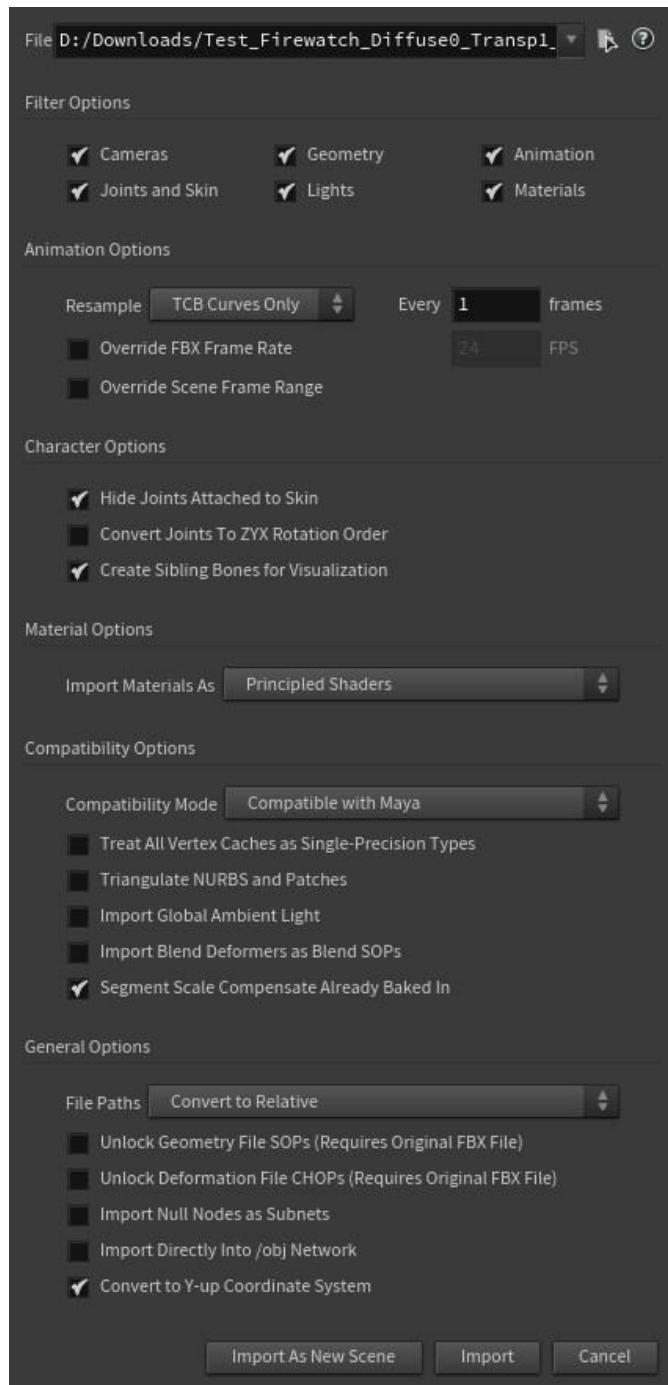
Issue: Textures display incorrectly in Viewport, wrong alpha and colour.

### 1. Import FBX File.

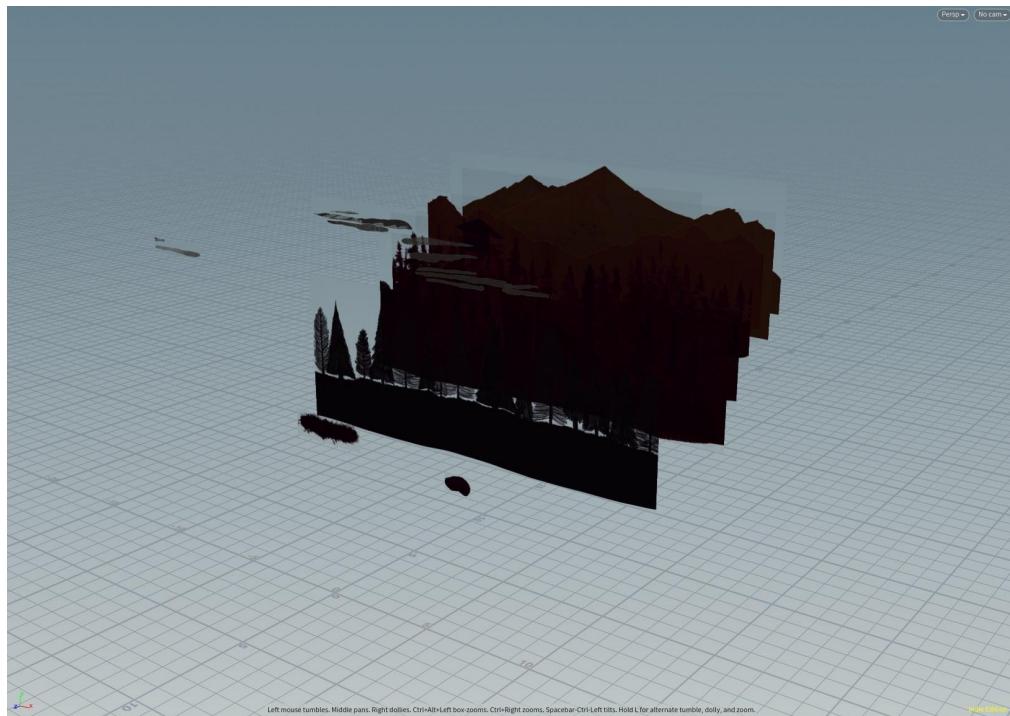
File>Import>Filmbox FBX



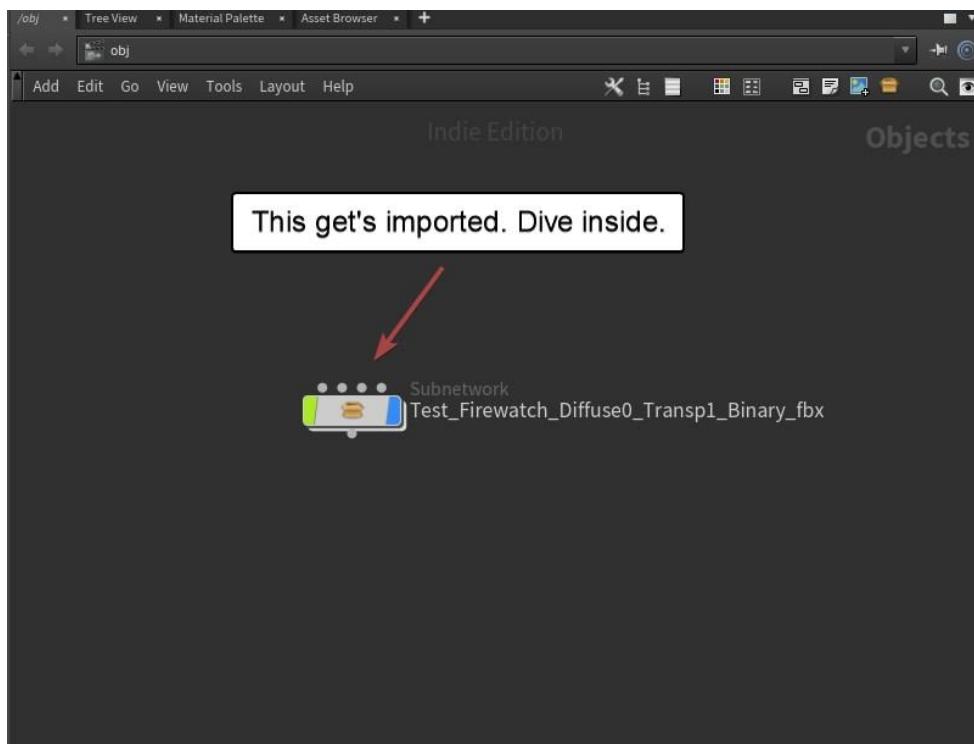
## 2. Default setting should work.



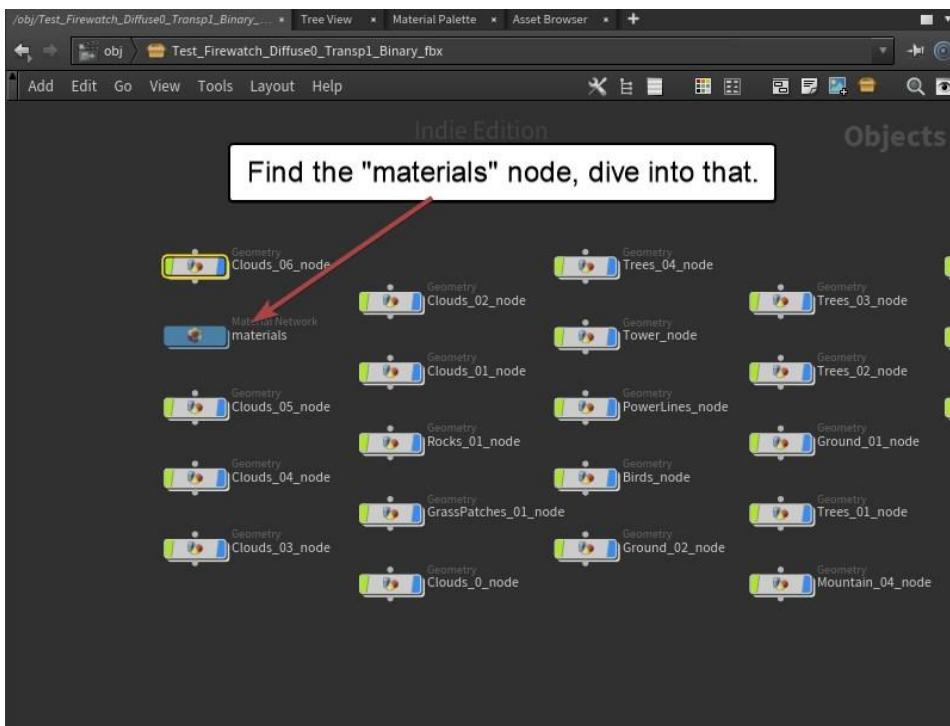
- Initially, meshes will appear very dark.



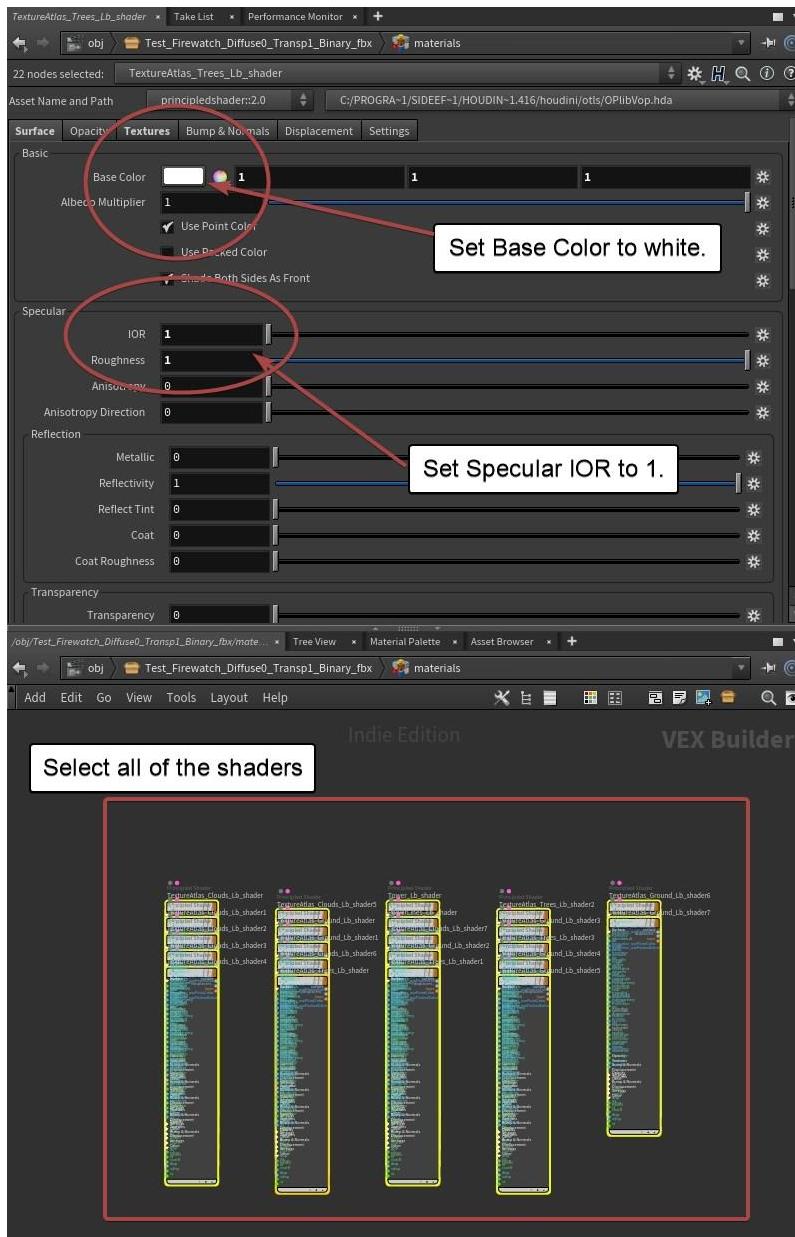
- A network is imported, go inside.



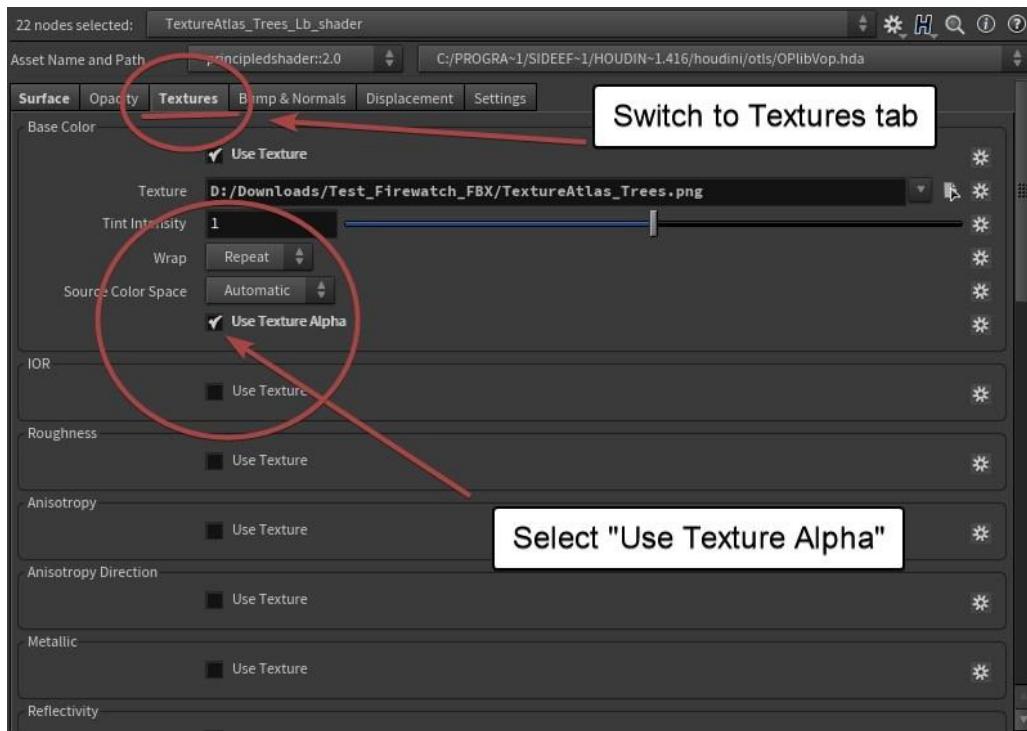
5. You will find a materials node inside the network, and dive into that.



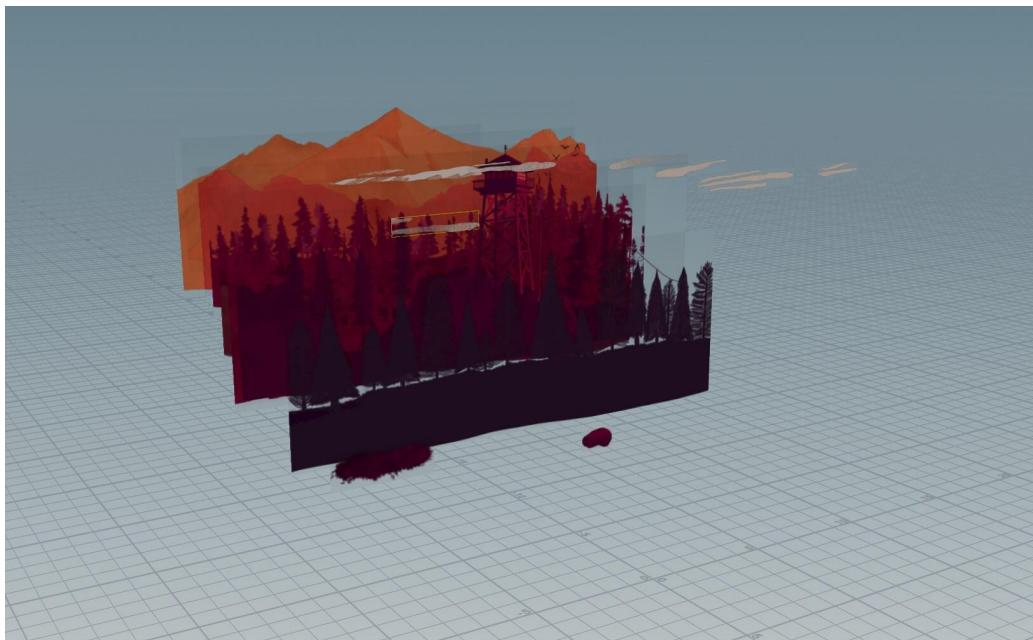
**6. Select all the shaders. Set Base Color to full white. Set Specular IOR to 1.**



7. Switch to the “Textures” tab. Select “Use Texture Alpha” under Base color. This will ensure that it renders properly in Mantra.

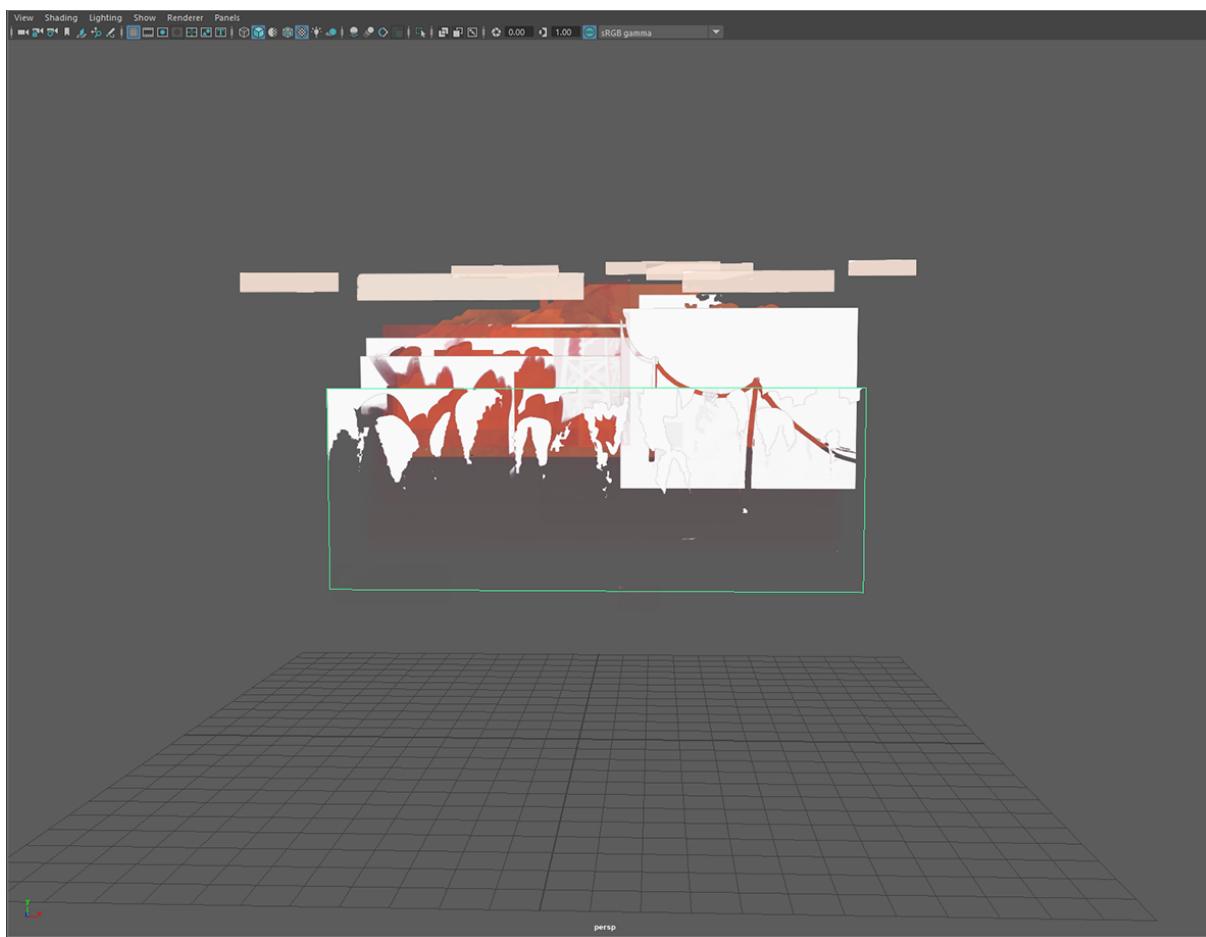


## Fixed Textures

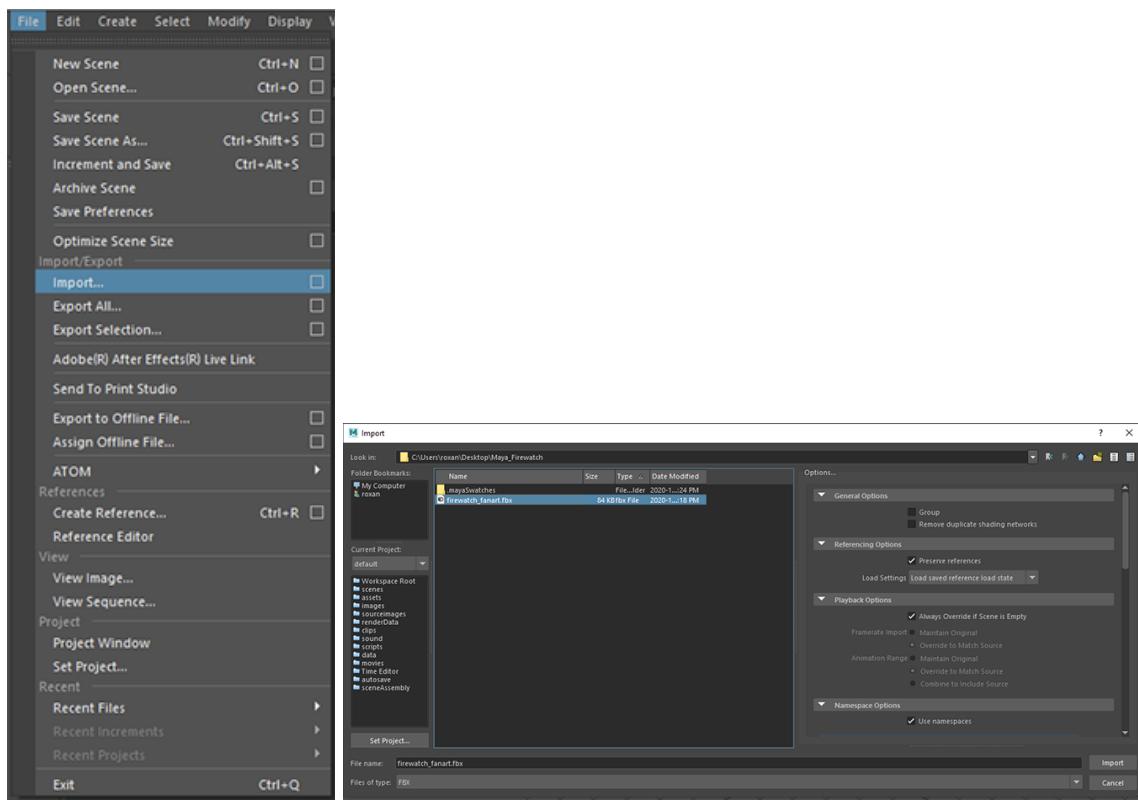


## Steps for fixing FBX textures in Maya

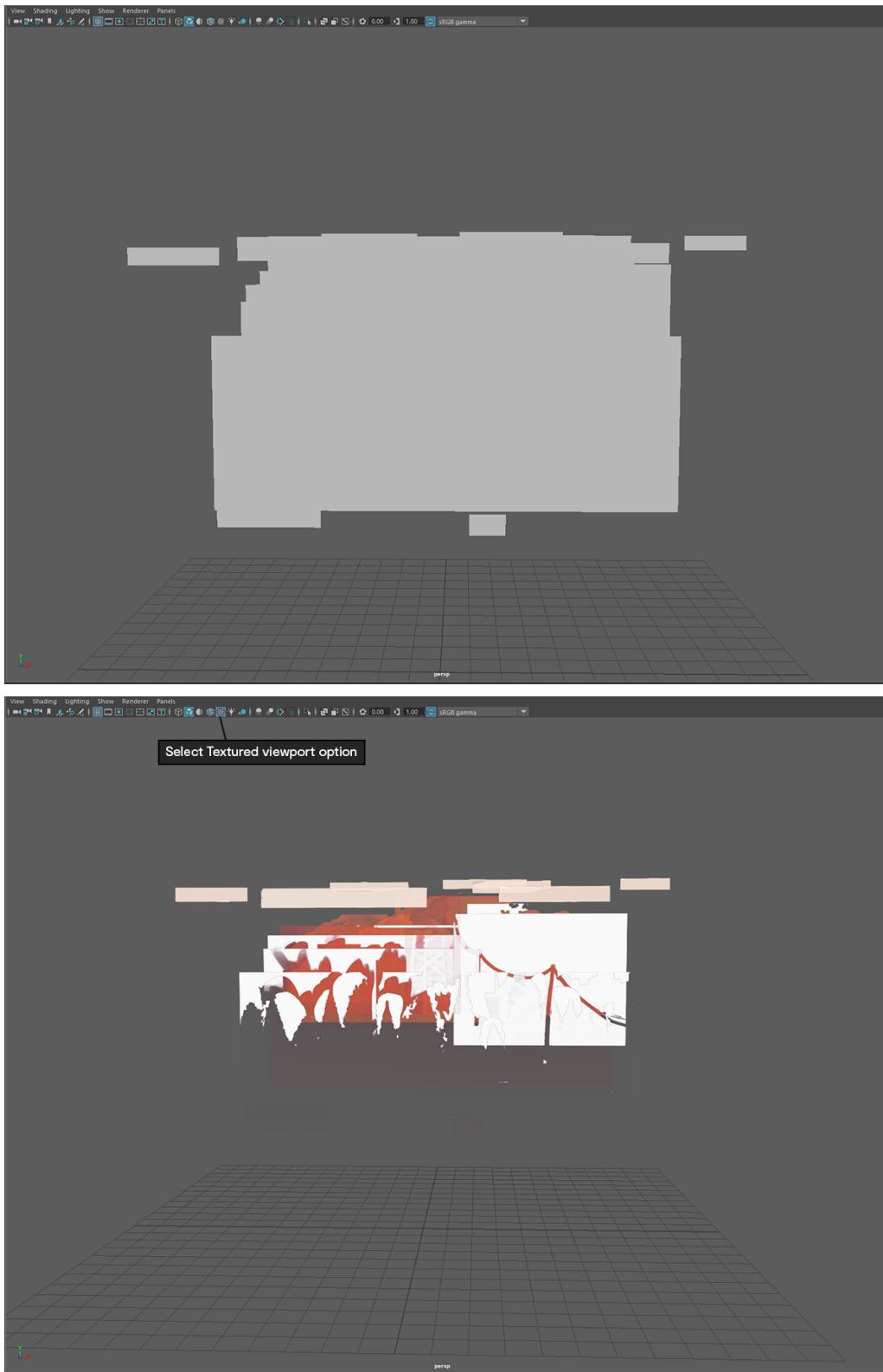
Issue: Textures display incorrectly in Viewport, wrong alpha and colour.



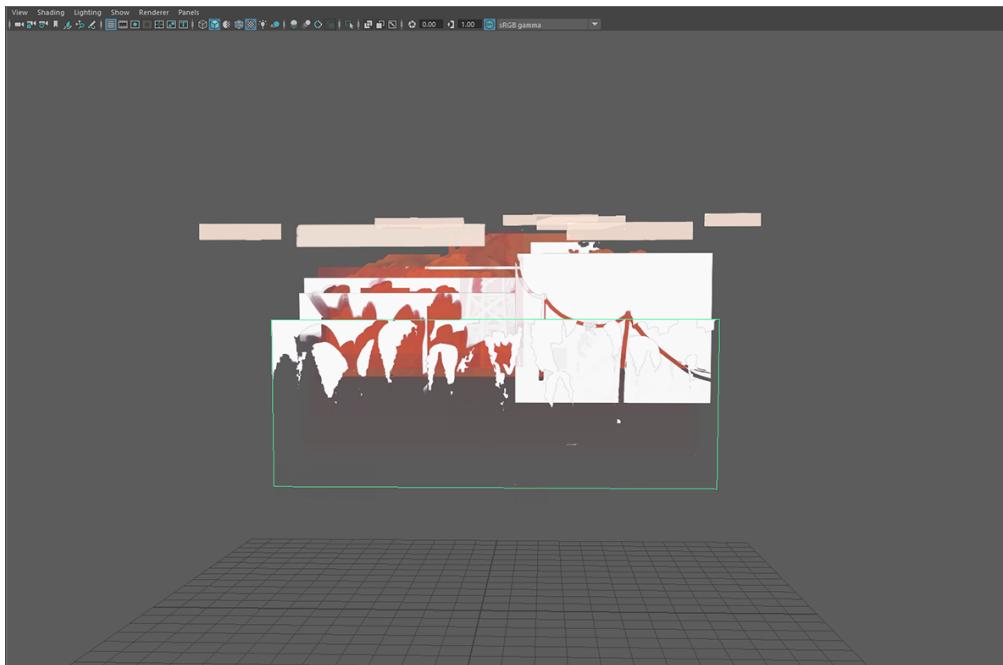
## 1. Import FBX file in Maya.



**2. Select Textured Object Viewport Option.**



**3. Select Object / Mesh.**

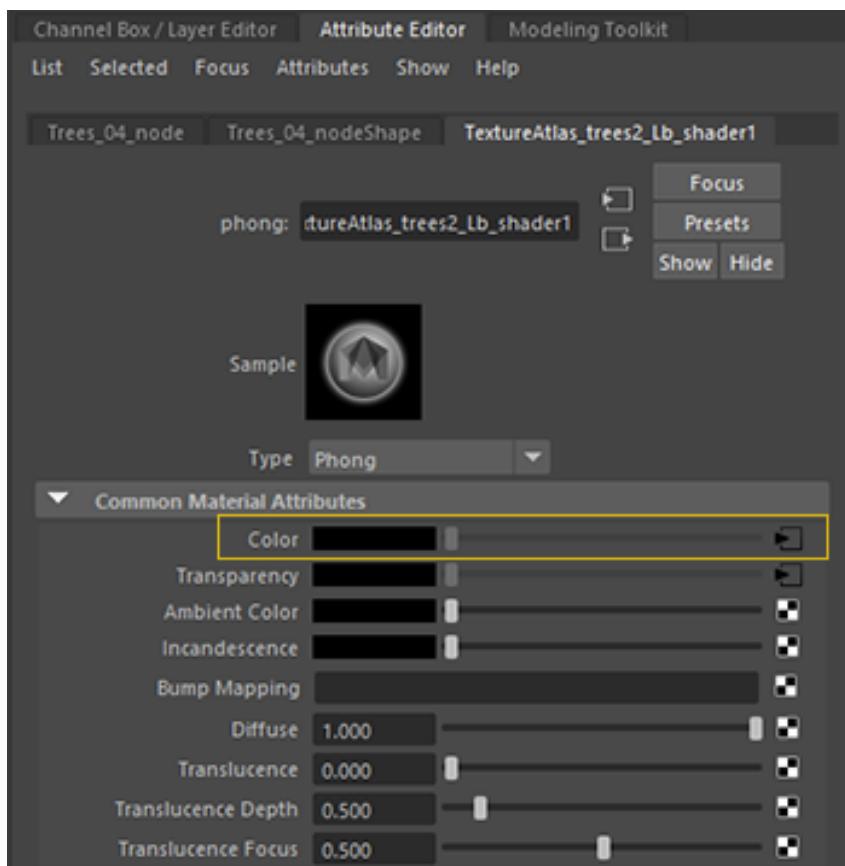


4. Open Object Shader Properties from the Attribute Editor, select the last tab on the right.

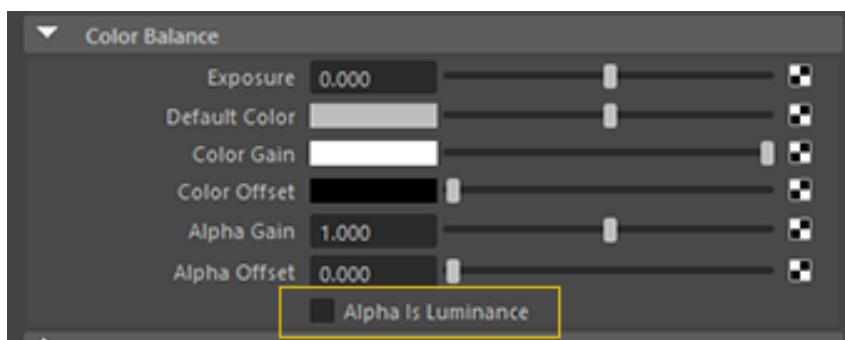


**5.** Open the Color texture properties.

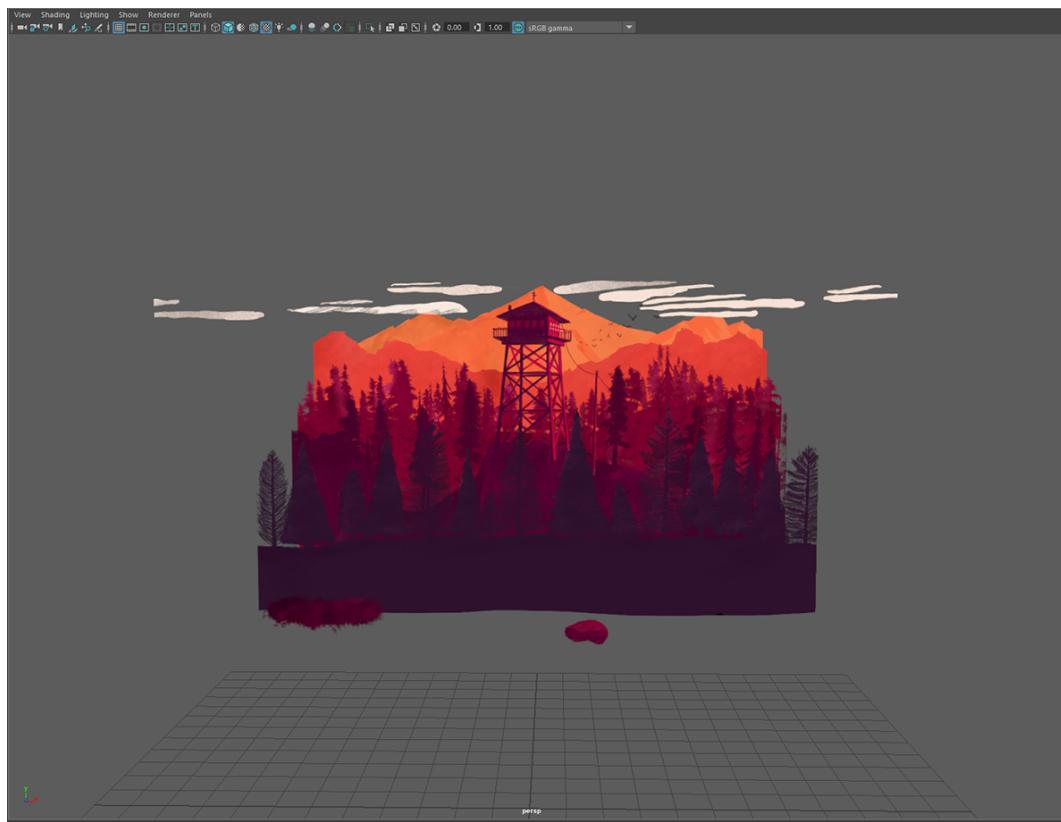
From Common Material Attributes, click the selector button next to Color.



**6.** In the Color Balance section, uncheck Alpha is Luminance.

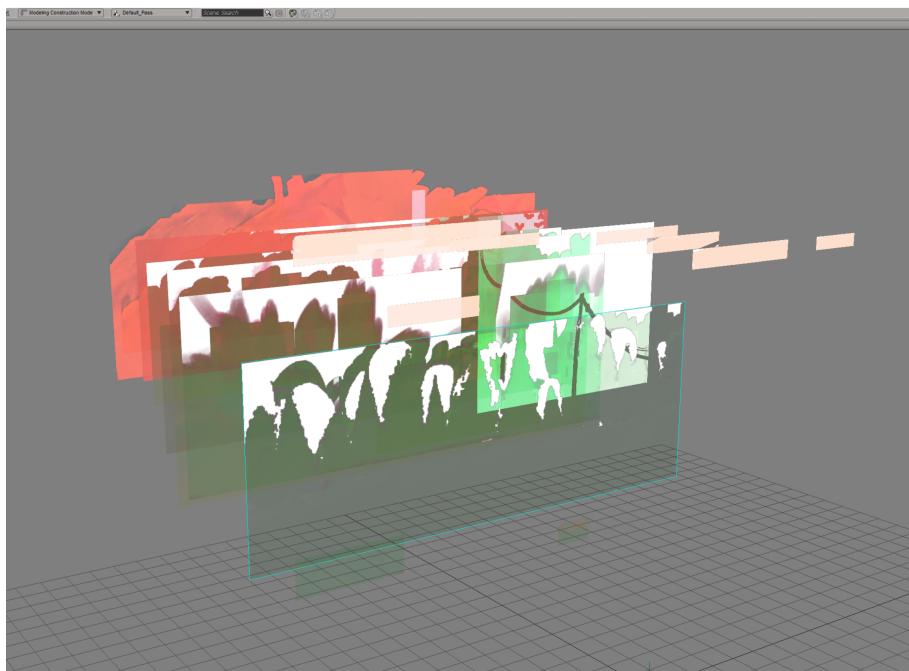


**7.** Repeat steps 3-6 on all Objects to fix all Alphas.



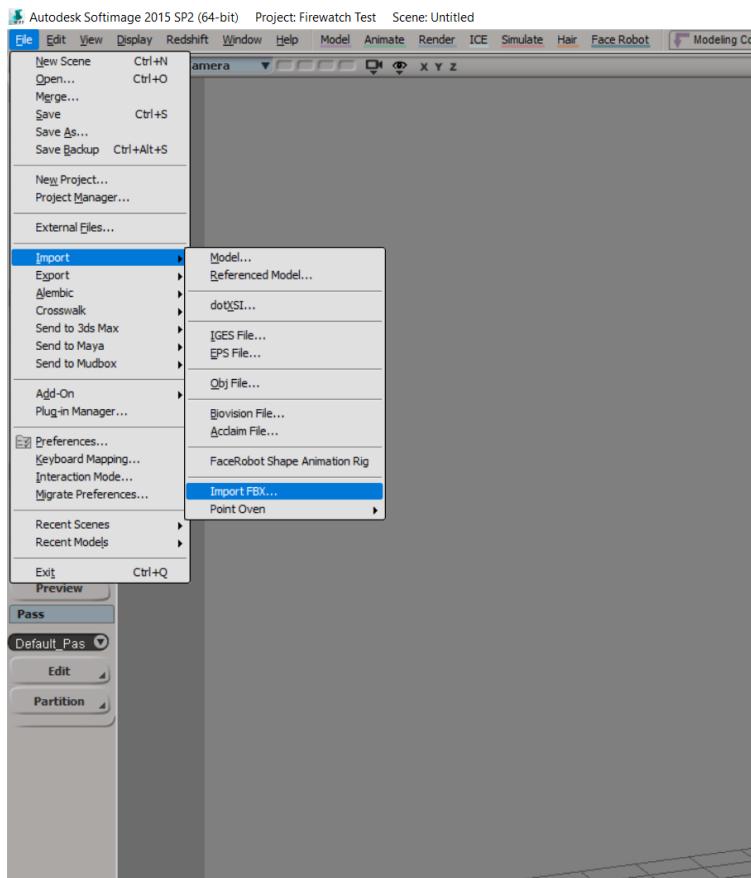
## Steps for fixing FBX textures in Softimage XSI

Issue: Textures display incorrectly in Viewport, wrong alpha colour.

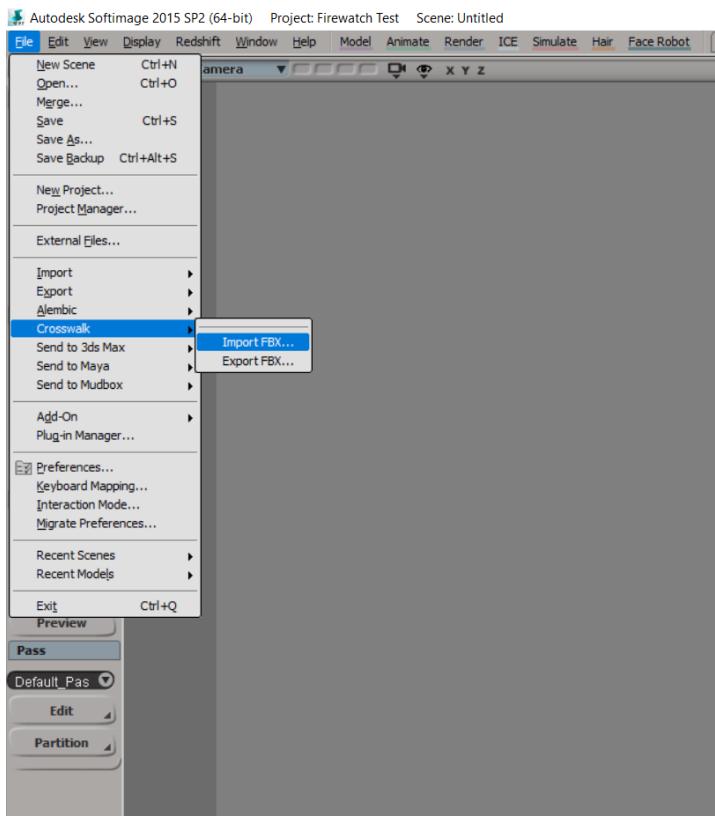


### 1. Import FBX file in Softimage XSI.

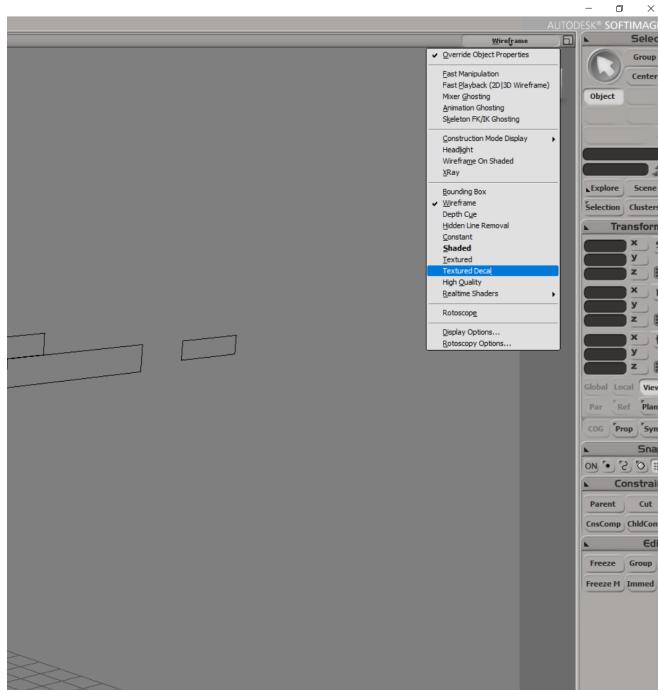
File>Import>Import FBX



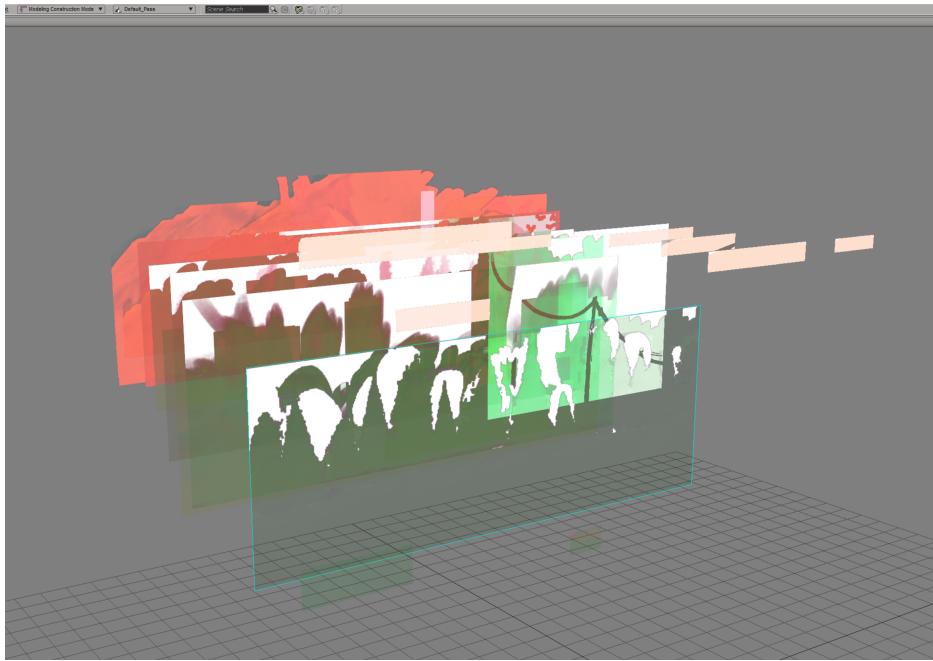
## Alternate Import Option. File>Crosswalk>Import FBX



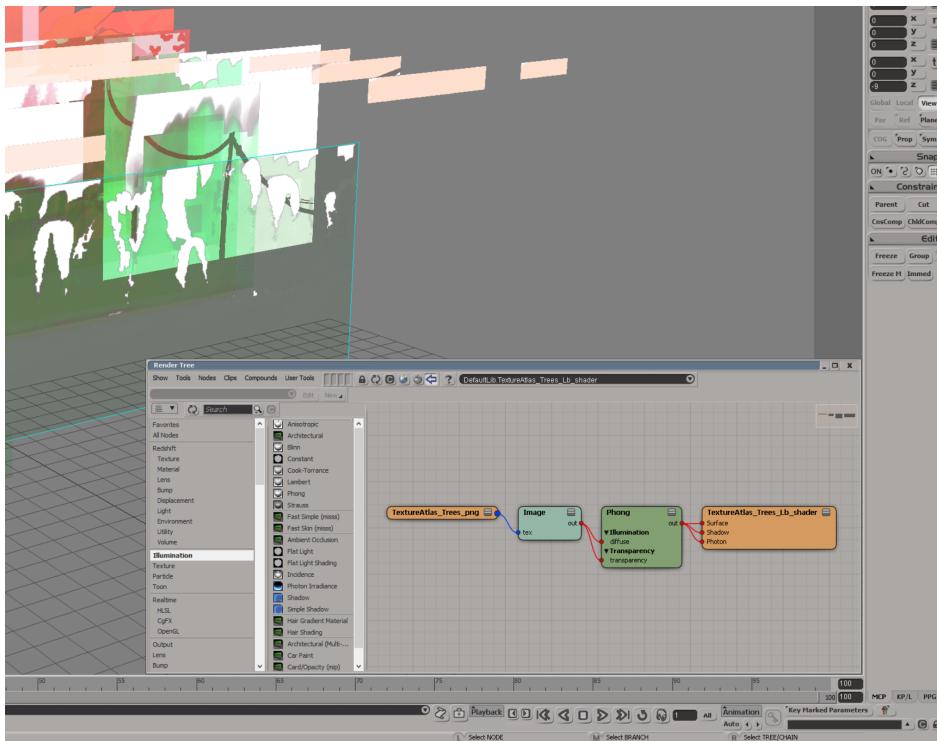
2. Select Textured Decal in the upper right menu of the viewport.



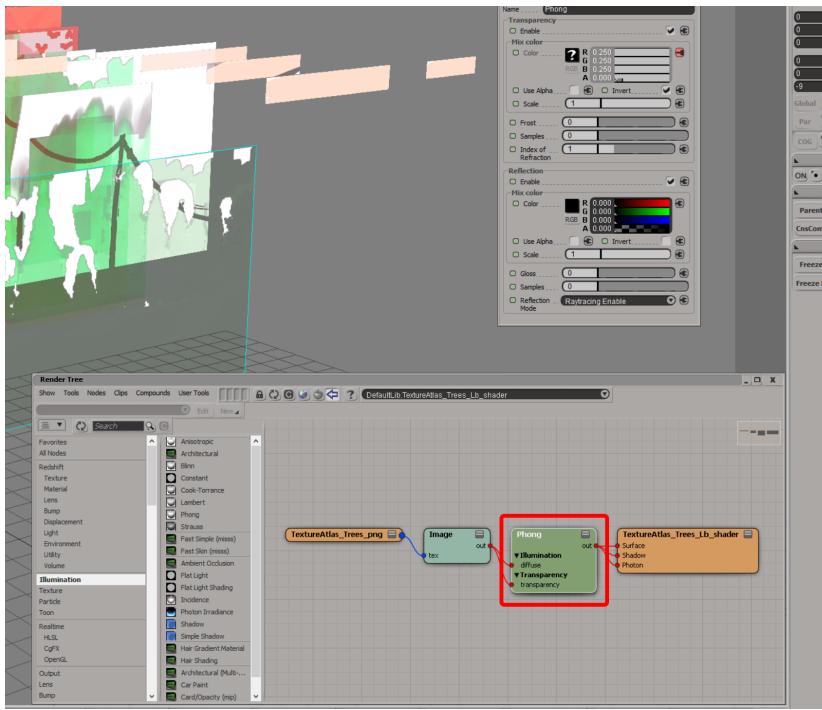
### **3. Select an object.**



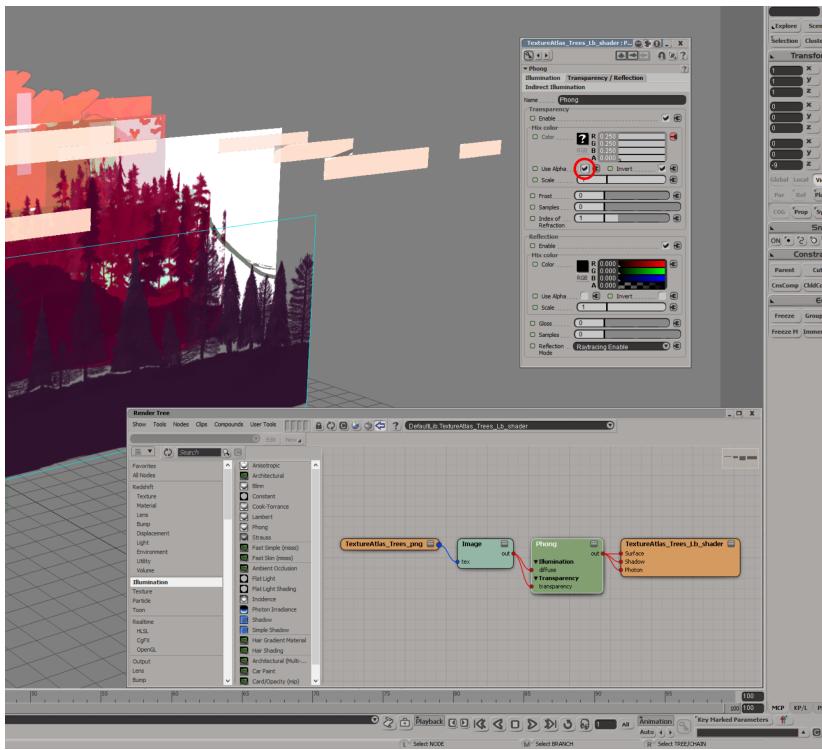
4. Open Render Tree (ctrl + 7 on keyboard) to access the object's material.



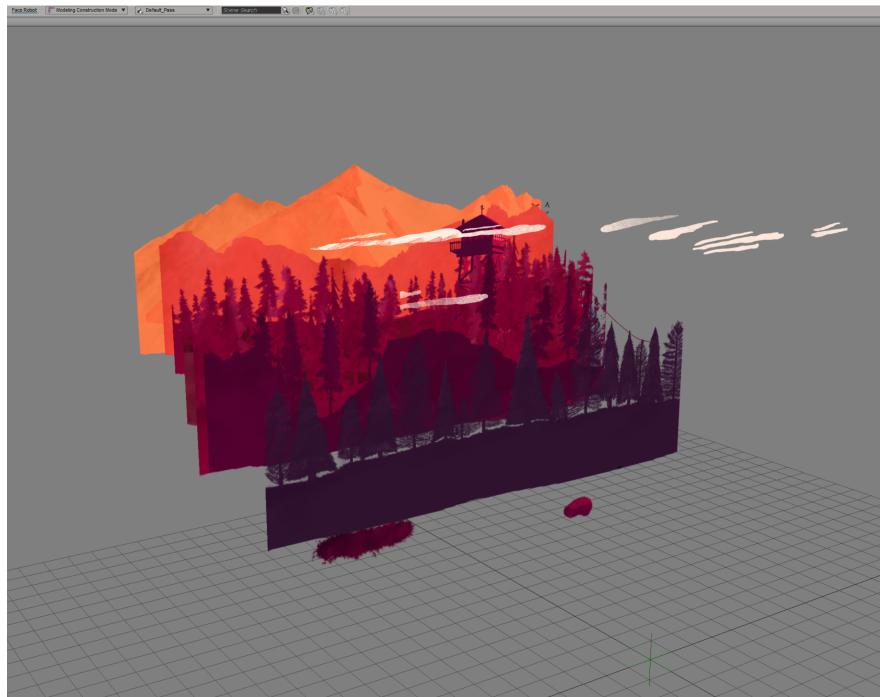
5. Double click on the material node.



6. In the “Transparency/Reflection” tab, check the “Use Alpha” checkbox.



7. Repeat Steps 3-6 for all objects in the scene with individual materials.



8. Fixed Textures. Test Render with light (Q (on keyboard) + Mouse Drag).

