

# 3D model import

## Troubleshooting guide

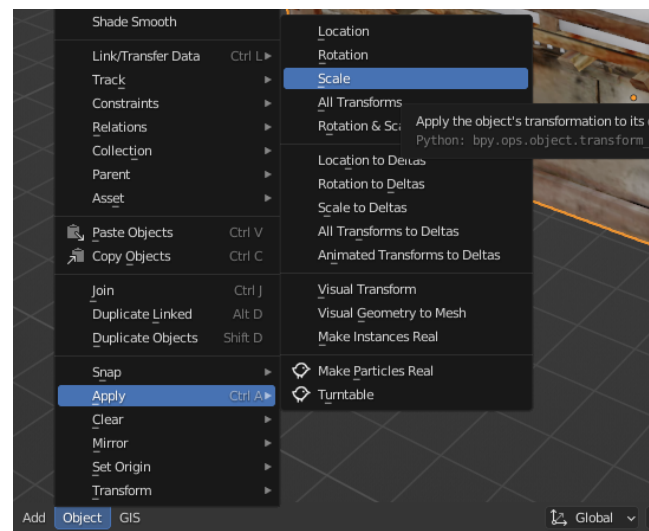
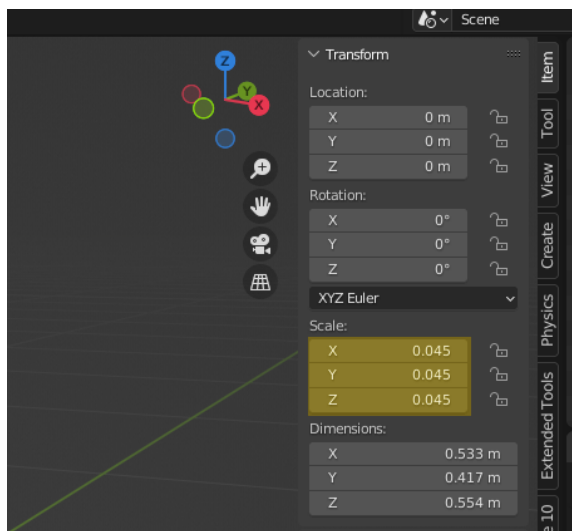
Using the free software **Blender** and a simple file editing software (**Notepad++** on a PC or the **Text Edit** app. on a Mac)\*, it's possible to solve most of the issues that can arise when importing custom-made or downloaded 3D models into Delightex Edu.

\* Need help using these tools? Watch our [tutorial](#).

### 1. Object too small or too big?

A 3D model might appear too big or too small once imported into Delightex Edu. Perhaps you're not even able to find your object because it's so tiny!

1. In Blender, press **N** or click the arrow at the upper-right corner to open the right menu and see the scale of your object.
2. Press **S** to rescale it and click **Object - Apply - Scale** to apply the new scale.

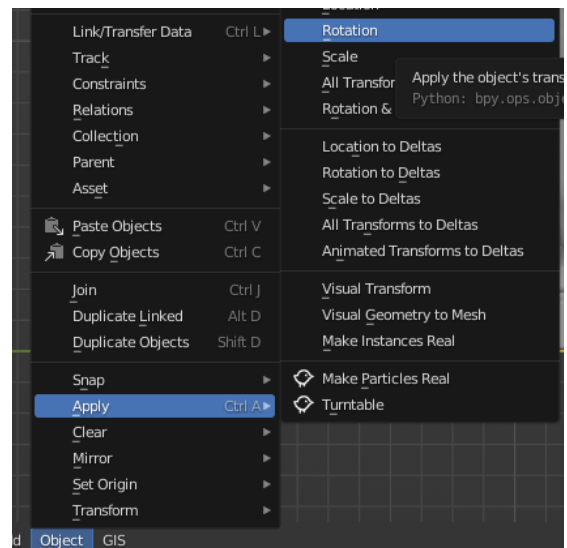
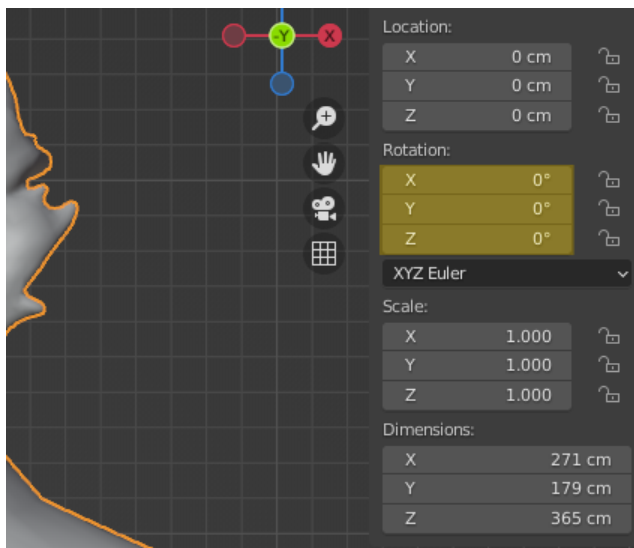


3. When you're done making adjustments to your object, export it again.
4. Go to **File - Export - FBX**, click **Export** and upload it again to Delightex Edu.

## 2. Object turned the wrong way?

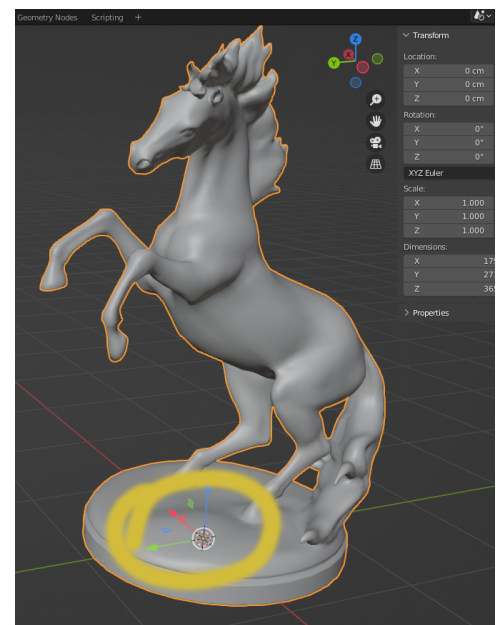
A 3D model might be turned the wrong way once imported into Delightex.

1. In Blender, reset the rotation to all **0**.
2. If the rotation is already at all **0** but the object is still turned, press **A** twice to select everything and **R** to turn the object to orient it however you like.
3. Click **Object - Apply - Rotation**.



A 3D model might be moving along a path in the wrong way, which can come from an issue with the initial orientation of your imported object.

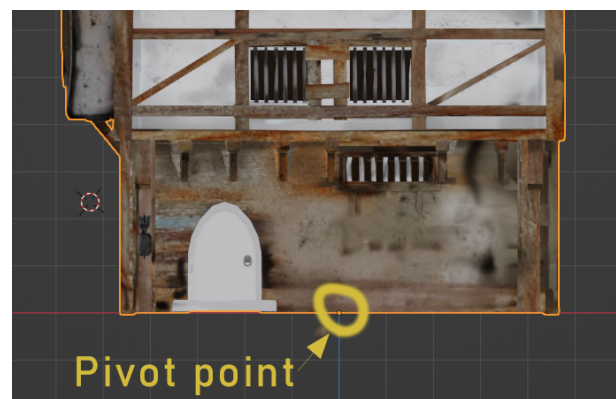
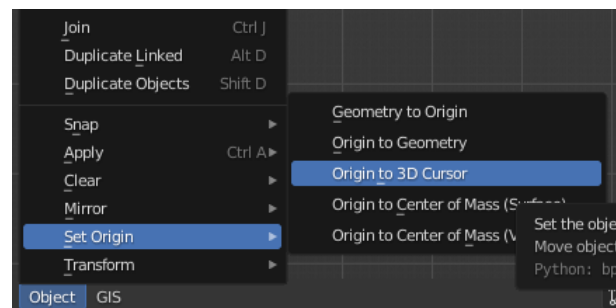
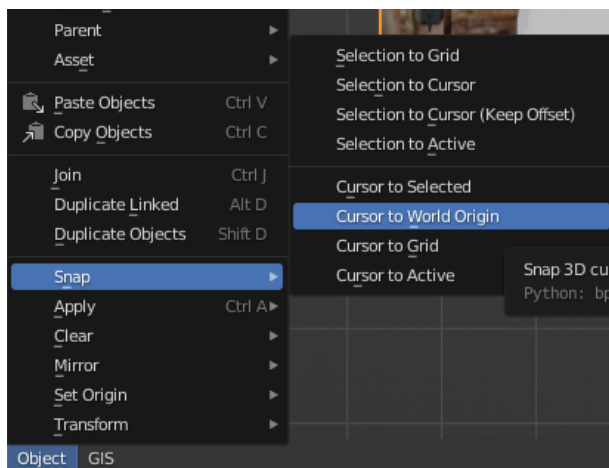
4. In Blender, change the orientation of your object to point in the **+Y** direction.
5. Click **Object - Apply - Rotation**.



### 3. Object under the ground?

A 3D model might be halfway sunken in the ground or even underneath, which can come from an issue with its pivot point.

1. In Blender, move your 3D model until it is above the red (X) and green (Y) axis to see it completely.
2. Click **Object - Snap - Cursor to world origin**.
3. Click **Object - Set Origin - Origin to 3D Cursor**.



## 4. Invisible parts on your object?

A 3D model might have some parts not showing or appearing transparent, which can come from faces being oriented in the wrong direction.

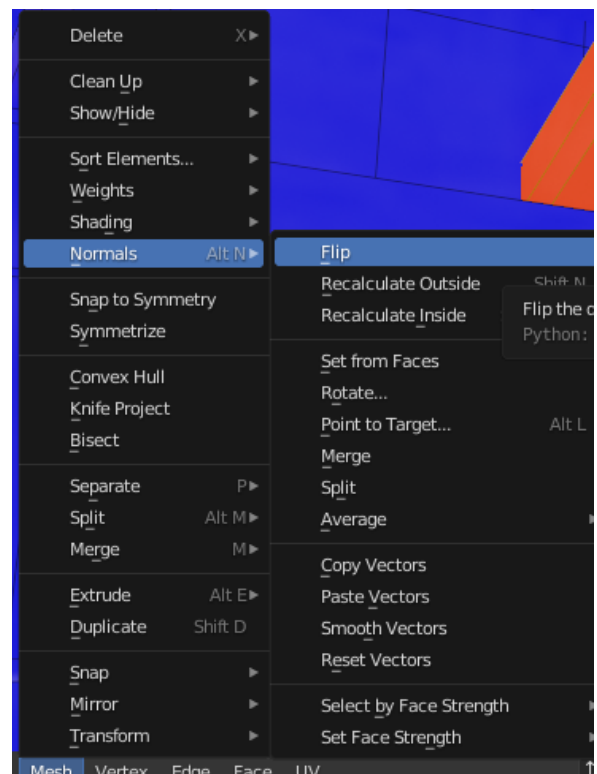
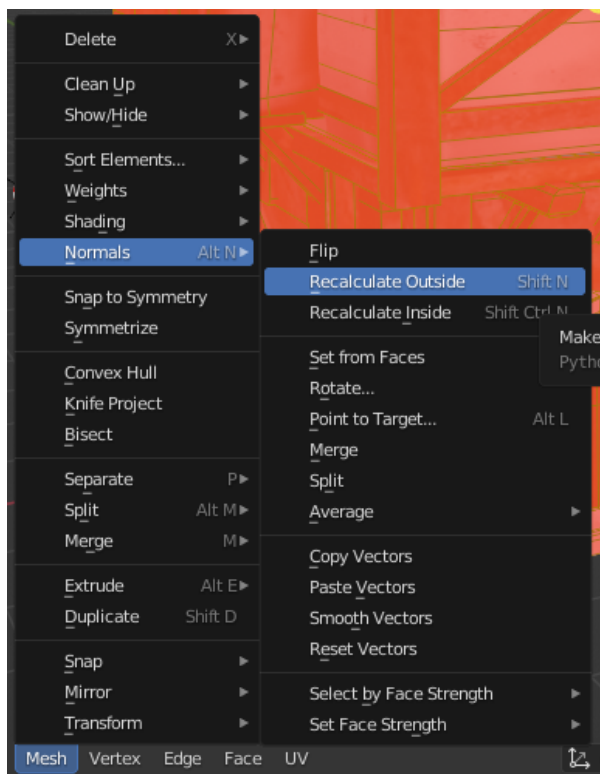
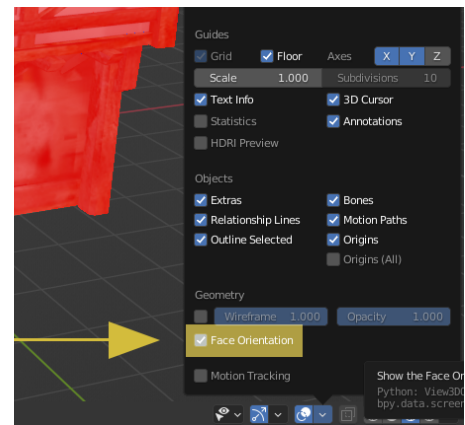
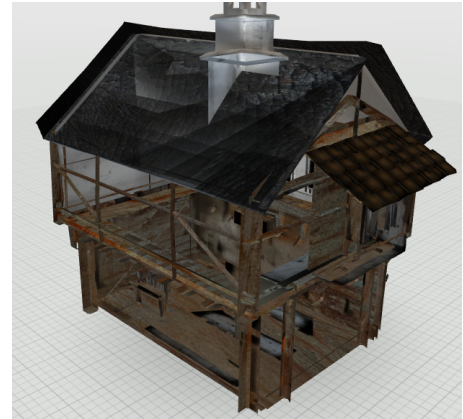
1. In Blender, activate **Face orientation** and check for red faces on your object.

This means that some faces are orientated inwards, leading to unwanted effects.

2. Switch to **Edit** mode and press **A** to select all faces

3. Click **Mesh - Normals - Recalculate outside** to reorient the faces.

Or go to **Mesh - Normals - Flip** if you need to flip some faces manually.



## 5. Texture not showing?

A 3D model might have a texture that isn't showing and appear white instead.

1. Drag and drop the FBX model and texture files together into Delightex. If you use an OBJ file, drag and drop the OBJ, the MTL and the textures together.\* \* Without the MTL, the texture won't appear. Note that STL files don't support textures.

2. If the texture still doesn't show, there could be a problem with your MTL file. Use an application like Notepad++ to edit the MTL file.

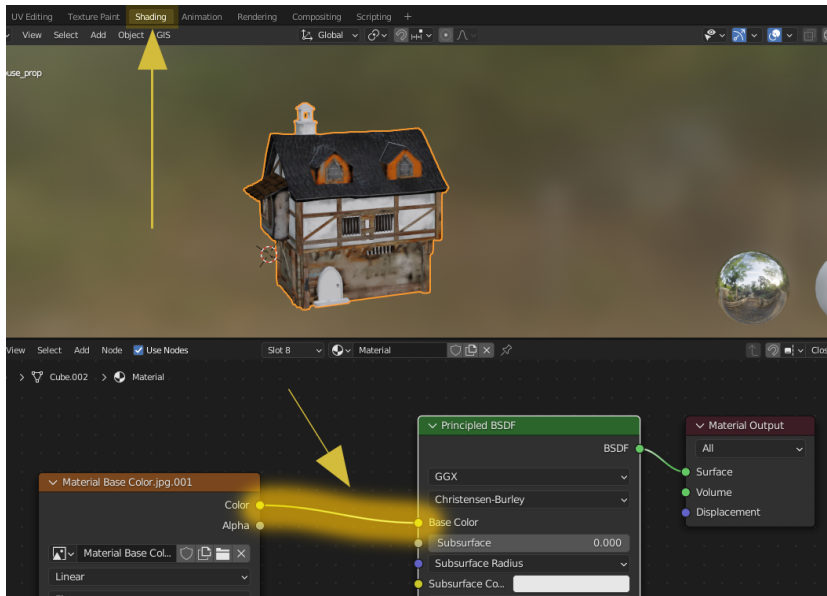
3. Right-click the MTL file and choose Edit with Notepad++ or use Text Edit on Mac.

4. Scroll down to the line starting with **map\_Kd** and edit it to the texture's name. If you don't have an MTL file, create one by reexporting your model from Blender.

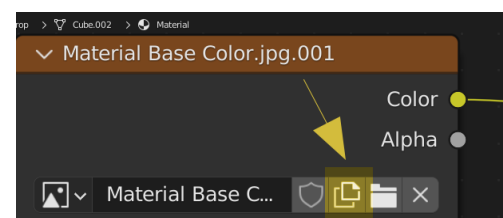
```
Medieval_obj.mtl
25 newmtl dirty_glass
26 Ns 777.603271
27 Ka 1.000000 1.000000 1.000000
28 Kd 0.060715 0.060715 0.060715
29 Ks 0.595455 0.595455 0.595455
30 Ke 0.000000 0.000000 0.000000
31 Ni 1.450000
32 d 1.000000
33 illum 2
34 map_Kd dirty_glass Base Color.jpg
```

5. If the texture is still invisible, open your model in Blender, switch to the **Shading** tab and select your model to see the material assigned.

6. Drag and drop the image texture and connect it like this:



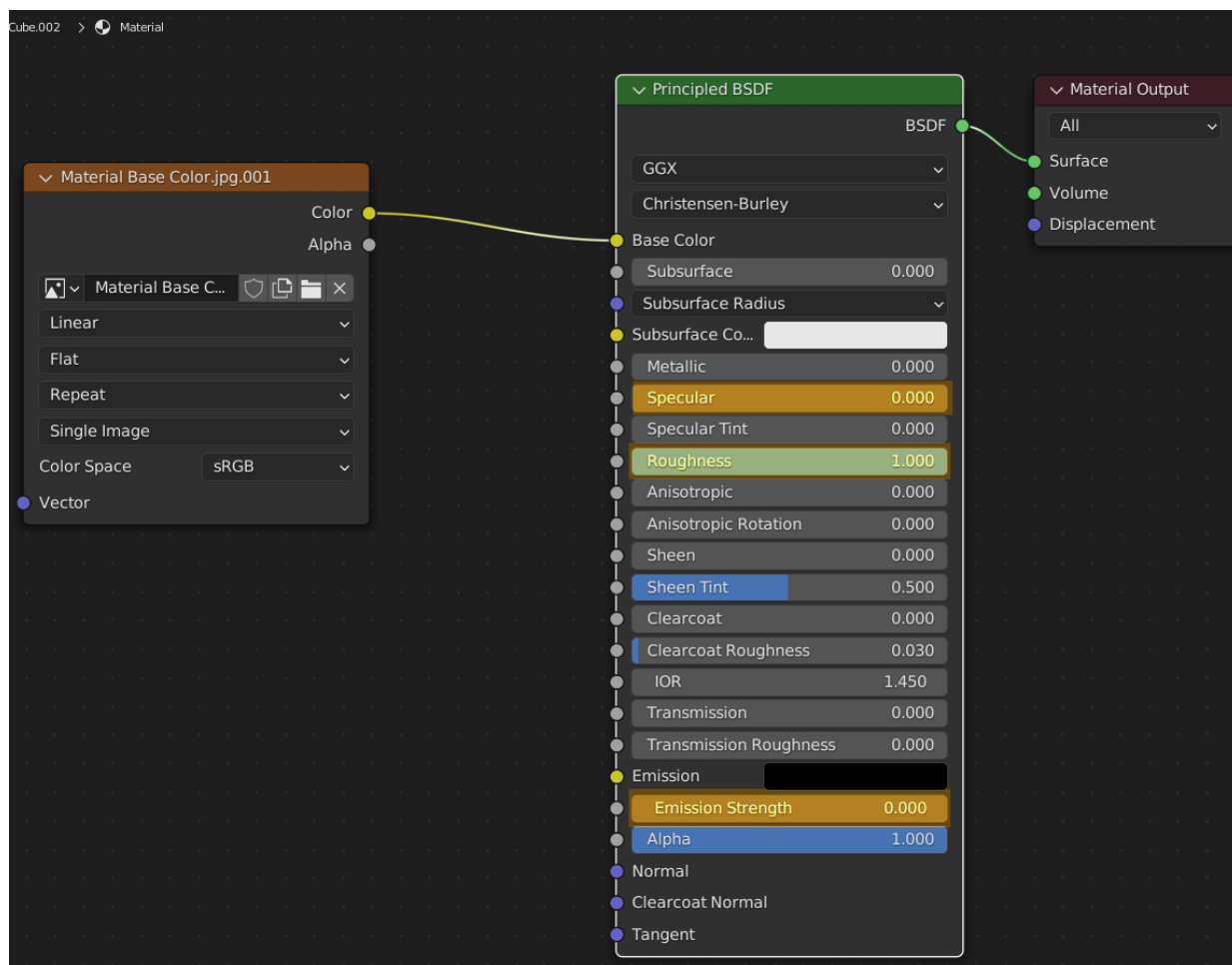
7. If there's already a texture, check whether the right texture is connected by clicking the below icon and opening your image texture.



## 6. Textures not looking as planned?

A 3D model might look too bright, dark, shiny or just not as expected, which can be solved by adding or adjusting the principled texture shader in Blender.

1. In Blender, set the **Roughness** to **1** and the **Specular** to **0** to avoid any shininess on your 3D model.
2. Set the **Emission strength** to **0** to display the true colors of the texture.





## 7. Upload never ends?

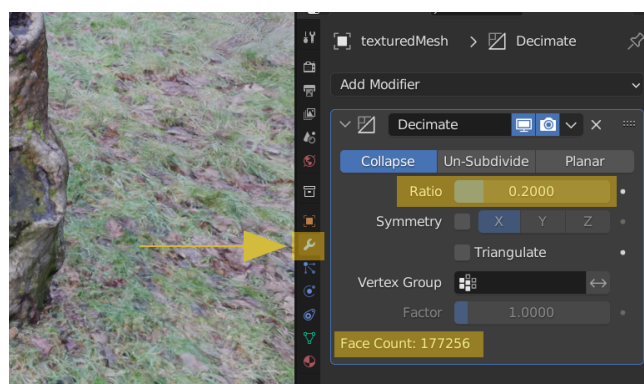
A 3D model might have uploading issues and never finish importing if it's too big. Your model uploads shouldn't go over 50 MB.

1. Find out what's making your file so heavy: Are the textures very big? Does your model have a very high amount of polygons? That often happens with 3D scans.
2. You can reduce the size of your textures using an image editing software and by using JPEG instead of PNG files.
3. You can reduce the size of a model by using the decimate modifier in Blender:

Select your model and click the below icon to add a modifier.

Choose decimate and try to set lower values for the ratio.\*

\* Blender can get slow in this process as it tries restructuring your model. Test how low you can go without altering its look completely.



## 8. Wrong 3D format?

Some 3D formats like Collada, for example, aren't supported by Delightex Edu.

1. To convert a 3D model to a different format, import it into Blender.
2. Export your object to FBX.

Uploading your 3D models to Delightex Edu should now work fine!

For more questions or feedback, please email [info-edu@delightex.com](mailto:info-edu@delightex.com)