

# Auto Texture Tiling Tool

Version 1.71

Read Me

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# 1. Basic Functionality

The Auto Texture Tiling Tool can be used for rapid prototyping. It provides a mean to build architecture from primitive blocks with fitting, tiled textures.

## 1.1 Usage

Attach the *AutoTextureTiling.cs* to any GameObject with a mesh. It will automatically adjust the UV coordinates of the mesh to tile the texture over the whole object.

**The *AutoTextureTiling* script manipulates the UVs and vertices of the mesh. Make sure that the “Read/Write Enabled” check mark is checked in the import settings of the mesh that you want to attach the script to, if you run into trouble.**

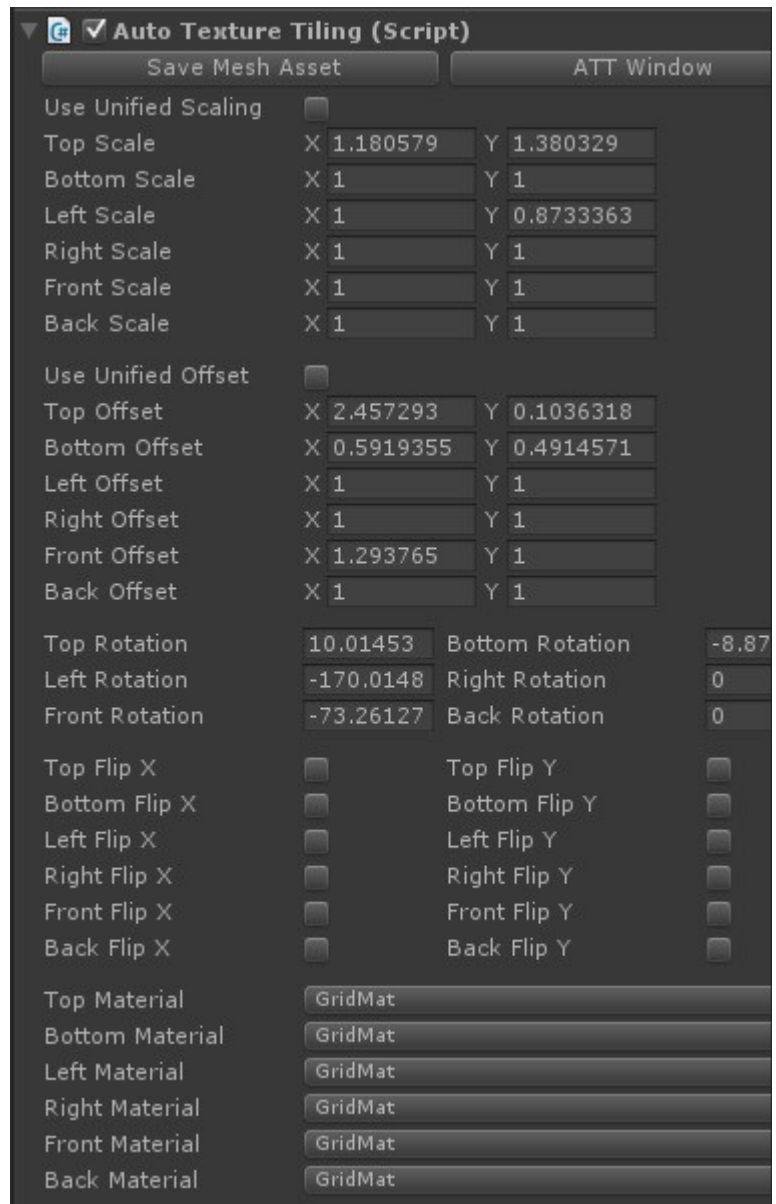
You can resize the object freely, which will automatically re-adjust the UV mapping.

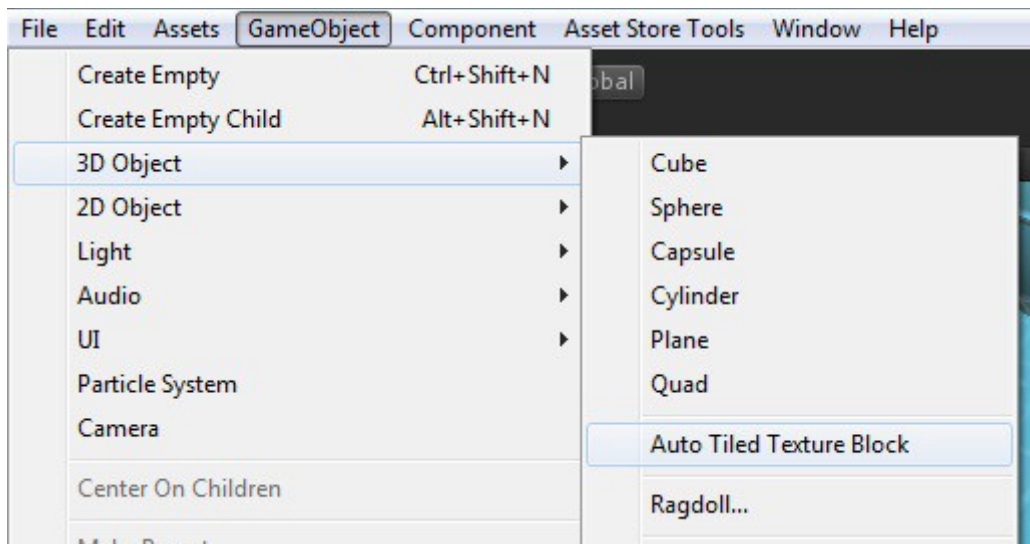
In the inspector of the *AutoTextureTiling* component, you can adjust the scaling, offset and rotation for each side individually. You can mirror the texture horizontally or vertically by setting the “Flip X” or “Flip Y” checkmarks.

You can also add more than one material to the MeshRenderer of the object and then select those materials for each side of the object. Make sure to assign each material to at least one side of the object to avoid rendering errors.

If you want the Texture to adjust dynamically at runtime, use *DynamicTextureTiling.cs*.

The Auto Texture Tiling Tool adds a new menu Item to “GameObject → 3D Object” named “Auto Tiled Texture Block”. Here you can create a Cube with the *AutoTextureTiling* component already attached.





## 1.2 Mesh Baking

You can save the created mesh as an asset by clicking on the “Save Mesh Asset” in the inspector. You can delete the mesh again by clicking the “Delete Mesh Asset” button. You should use this to delete the mesh asset before deleting the last object instance that uses this mesh. Otherwise you have to delete the mesh asset by hand. Meshes are stored by default in “Meshes” sub-folder of the “AutoTextureTilingTool” folder, so this folder should not be renamed.

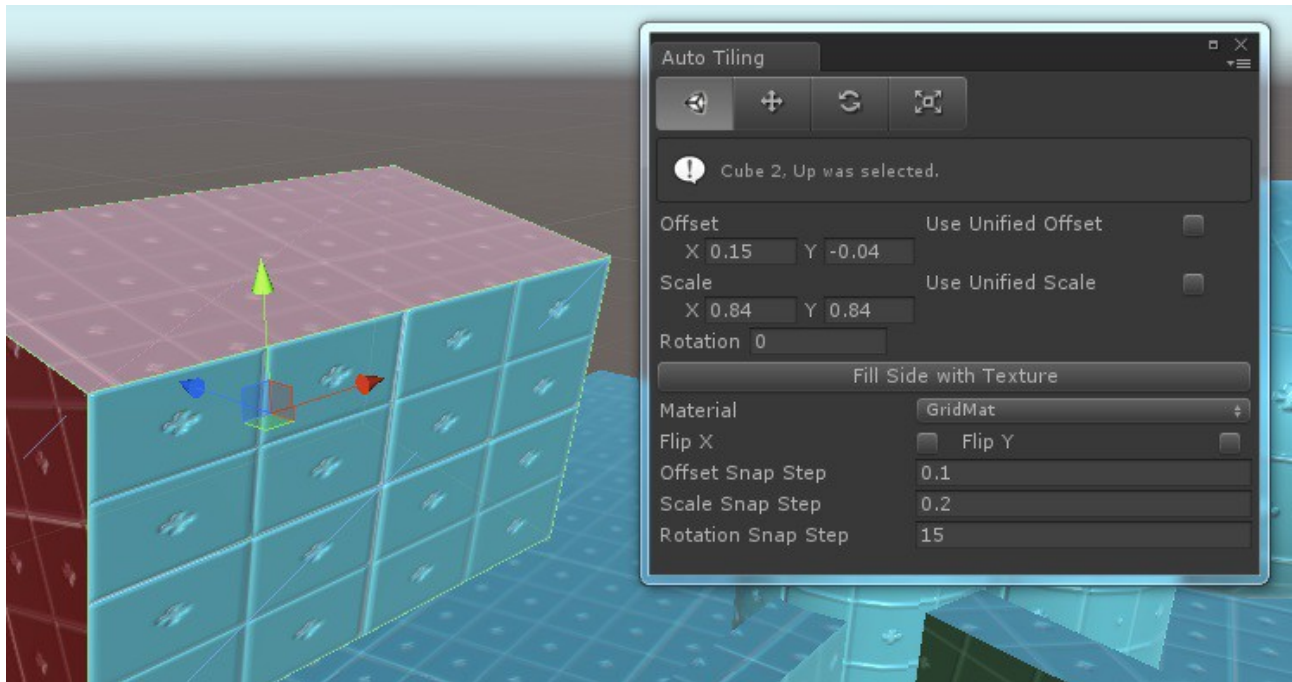
## 1.3 Prefabs

You normally can't make prefabs from Auto Texture Tiling Tool objects without running into troubles. You can avoid these troubles by saving the mesh first before creating the prefab. (see “Mesh Baking” above)

## 2. Gizmos and Editor Window

You can click on the “ATT Window”-Button in the inspector of an AutoTextureTiling component to show the “Auto Tiling” editor window. Now you are able to select individual sides, which will be highlighted red. The values of each side can then be controlled by the editor window.

You can also show this window by clicking in the menu on “Window → Auto Texture Window”.

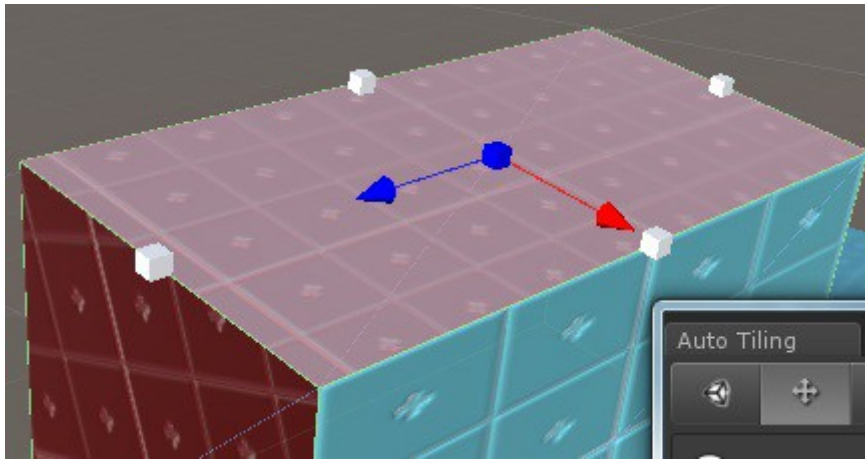


The functionality is basically the same as in the Inspector, but you no longer have to guess, which value belongs to which side.

You have a toolbar with four buttons on top of the window. The first button with the Unity symbol lets you use the normal object manipulation tools for moving, scaling and rotating the object. The other three buttons activate gizmos for setting the offset, scaling and rotation of a texture.

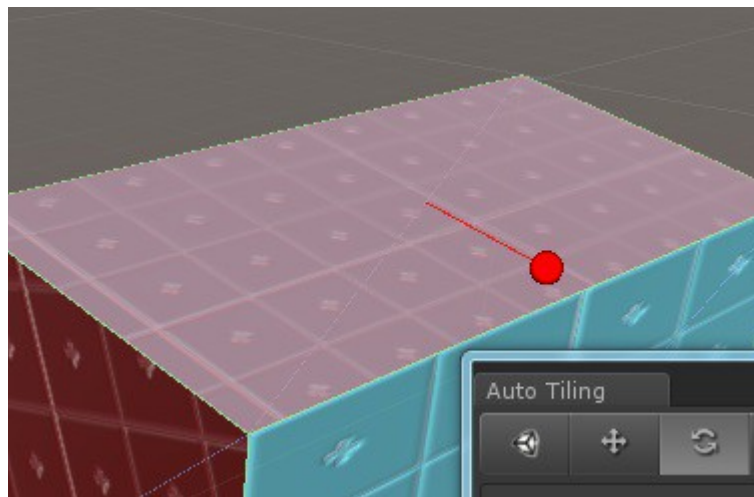
### 1.1 Offset

You can control the offset by dragging the mouse on the arrow axis. Hold the *Left Control* key to snap the offset to discrete steps. Click on the blue handle to center the texture and click on the white handles to snap the texture to the edges of the object.



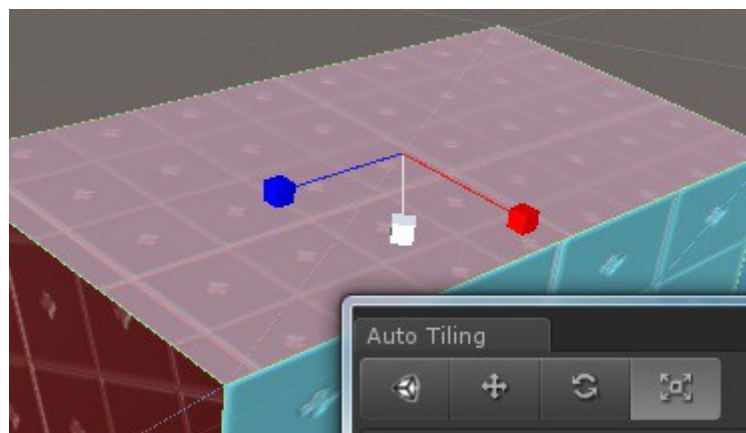
## 1.2 Rotation

Click and drag the sphere handle to rotate the texture. You can again hold the *Left Control* key to snap the rotation to fixed degrees.



## 1.3 Scale

Like with the offset, you can control the scale by clicking and dragging along the X or Y axis of the texture. Use the white handle to scale the texture uniformly. Hold the *Left Control* key to snap the scaling to discrete values.



## 1.4 Fill Side with Texture

The “Fill Side with Texture” button lets you fit a texture on the side of an object. It resets offset and rotation and adjusts the scaling for the texture to fit.

## 1.5 Snap Settings

Also in the Auto Tiling Editor Window you can set the step size, in which the offset, scaling and rotation will snap while holding down the *Left Control* key. Offset and scaling are clamped between 0 and 1, since they are percentage values. Rotation snapping is in degrees.