

GRID MASTER

DOCUMENTATION

This documentation can also be found online at
<https://decimate.gitbook.io/grid-master/>

Contents

GRID MASTER

Overview	3
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INSTALLATION

Requirements	4
Installation	5

USAGE

Demo Scene	6
3D Primitives	7
Sample Materials	8
Textures	10
Shaders	12
Create Material	13
Material Properties	
- Coordinates	15
- Texture and Color	16
- Offset	17
- Edge Sharpness	18
- Tiling	19
- Blend Mode & Blend Opacity	20
- Dirt	21
- Smoothness	22
- Metallic	22
- Emission	23

SUPPORT

Contact	24
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Overview

Grid Master is a highly customisable shader, designed for creating grid materials in Unity. It also includes a number of custom 3D primitives, to help quickly grey box game levels and ideas.



Grid Master is available for free, from the [Unity Asset Store](#).

Requirements

Unity 2022.3

Grid Master requires Unity 2022.3

Universal Render Pipeline (URP)

The shaders and materials are compatible with the [Universal Render Pipeline](#). I might consider releasing a HDRP version in future, if there is enough interest.

Shader Graph

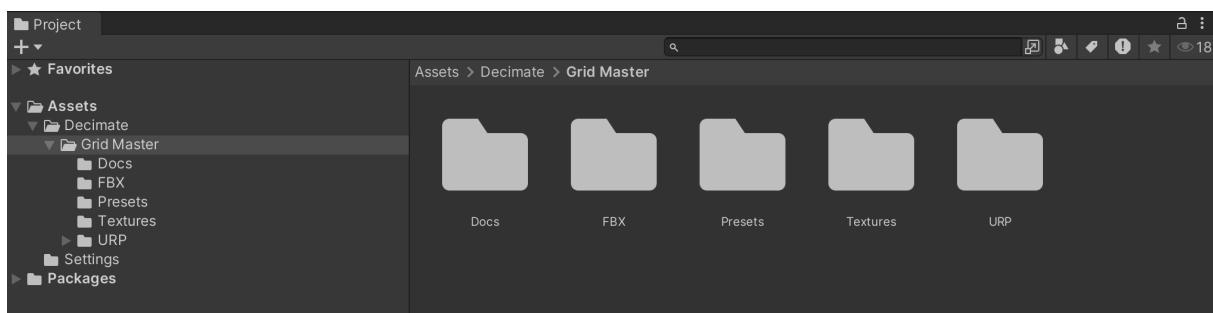
Unity automatically installs [Shader Graph](#) in your project, when you install URP.

Installation

Grid Master is available for free, from the [Unity Asset Store](#).

Grid Master can be installed through the [Package Manager](#) window, under "My Assets".

Once installed the "Grid Master" directory can be located in the Unity Project panel.



Upgrade

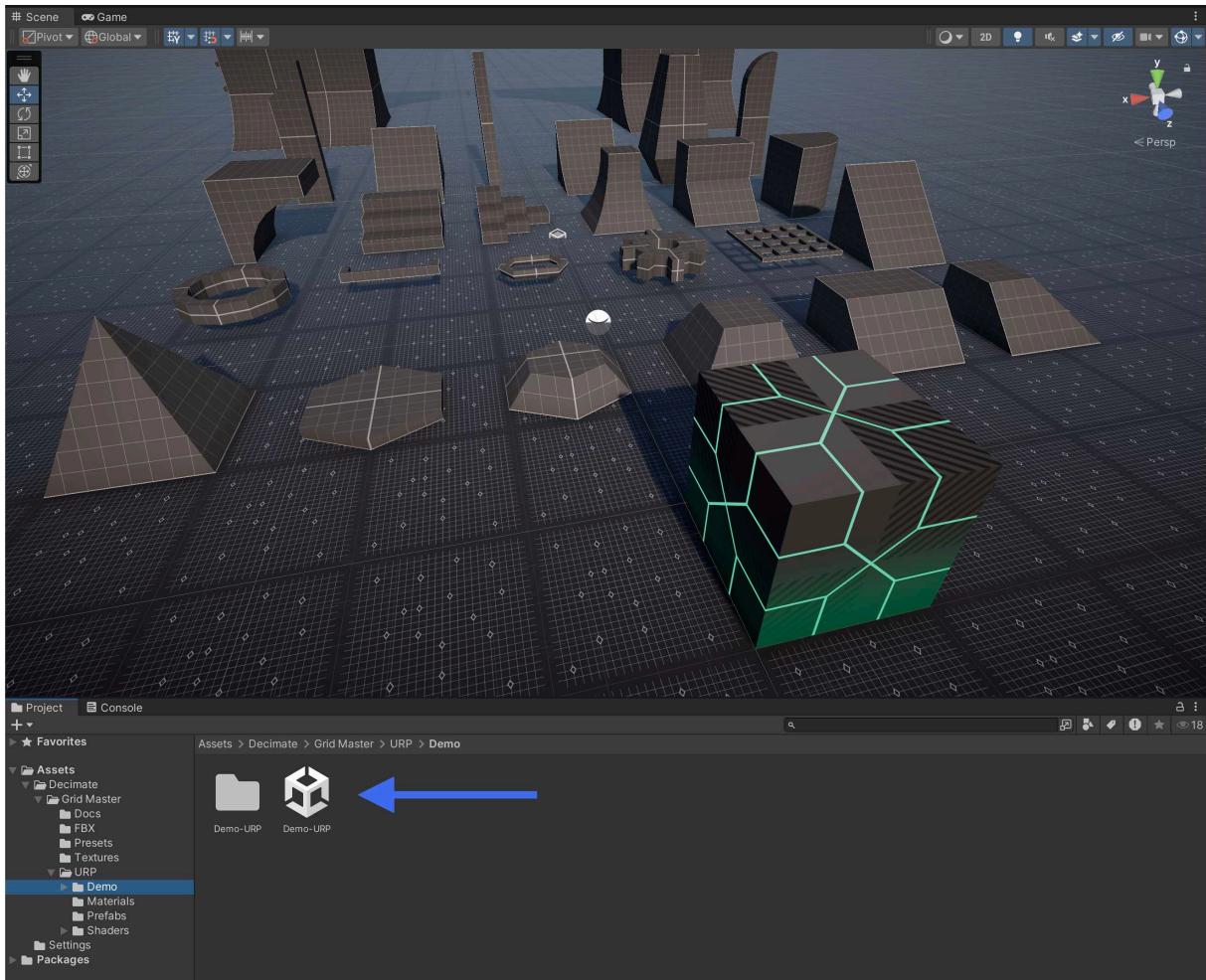
I recommend making an external backup of the "Grid Master" directory, before you upgrade. This could be important, if you have previously created custom materials or textures.

The upgrade can be downloaded and installed through the [Package Manager](#) window, in your Unity project.

Demo Scene

Once you have the **Grid Master** package installed, in your Unity project, the quickest way to get started is to open the demo scene.

This can be found in the Project panel by navigating to **Decimate > Grid Master > URP > Demo** directory. Click on the scene file to open the Demo.



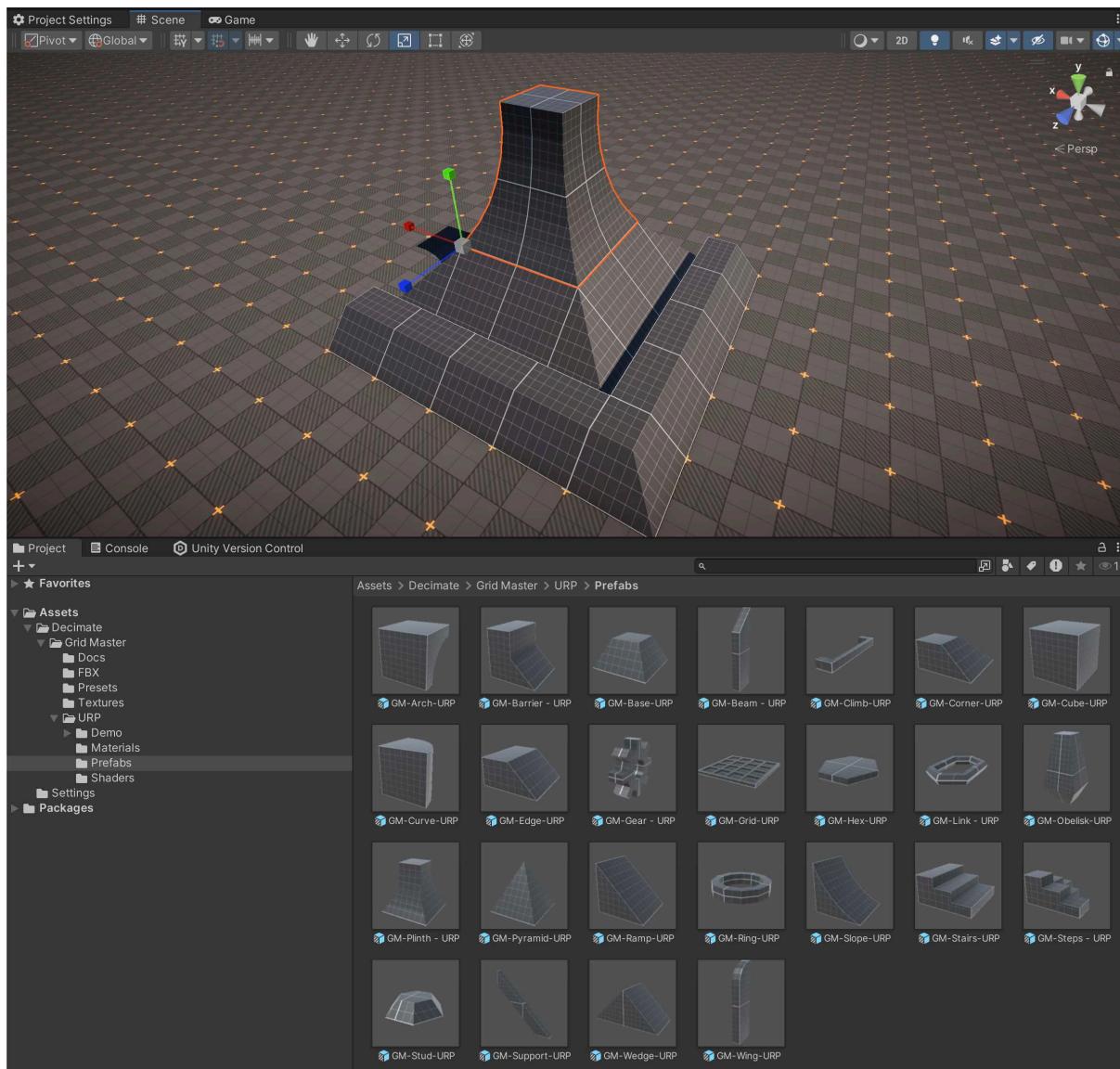
3D Primitives

Grid Master comes with a number of 3D primitives. These can be found in the **Grid Master > URP > Prefabs** directory.

The 3D primitives have been UV mapped and saved as Prefabs.

Drag these into your scene, and get creative. Keep in mind, you can transform and combine these primitives, to create new shapes.

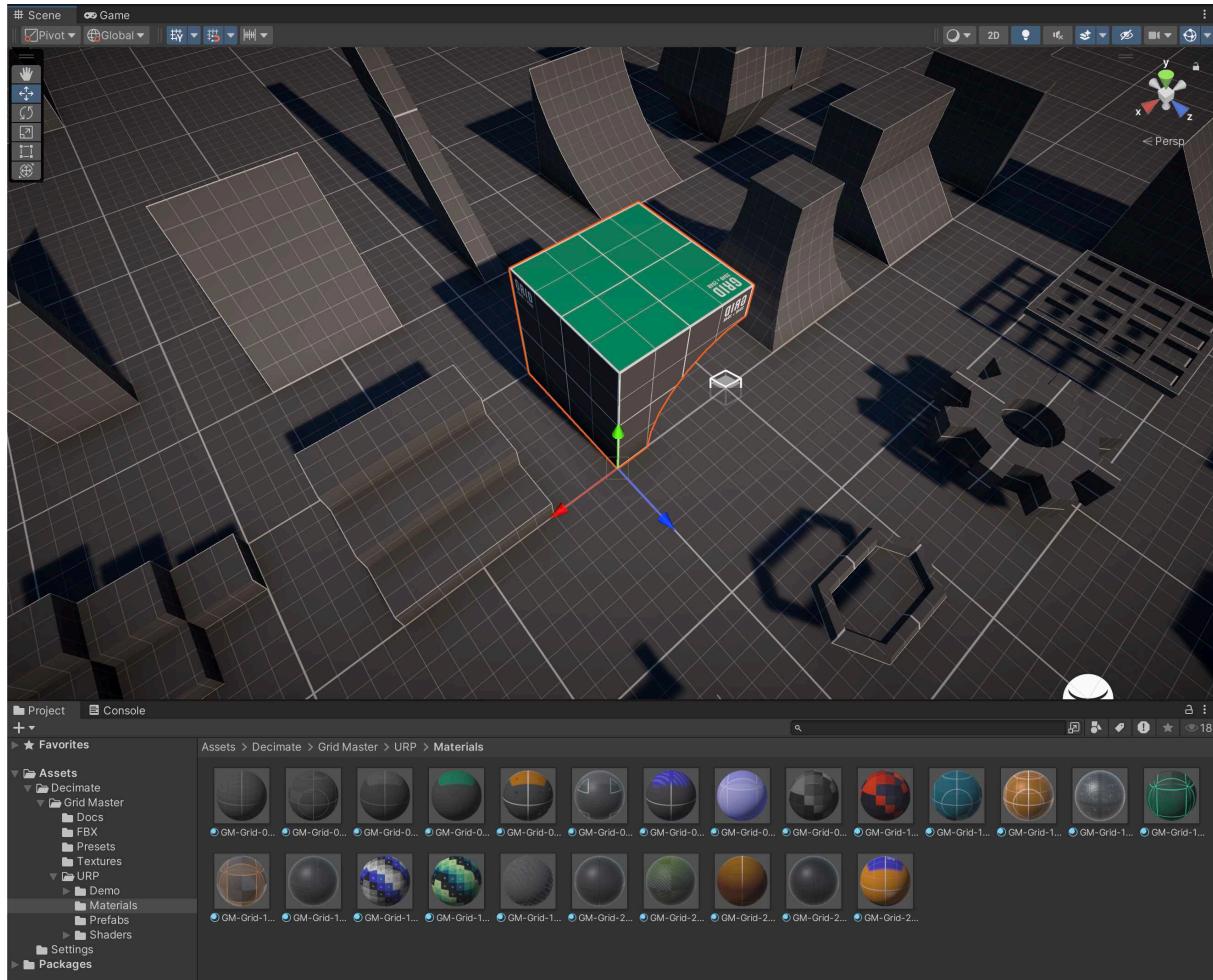
The grid material will tile automatically as you scale the Prefab.



Sample Materials

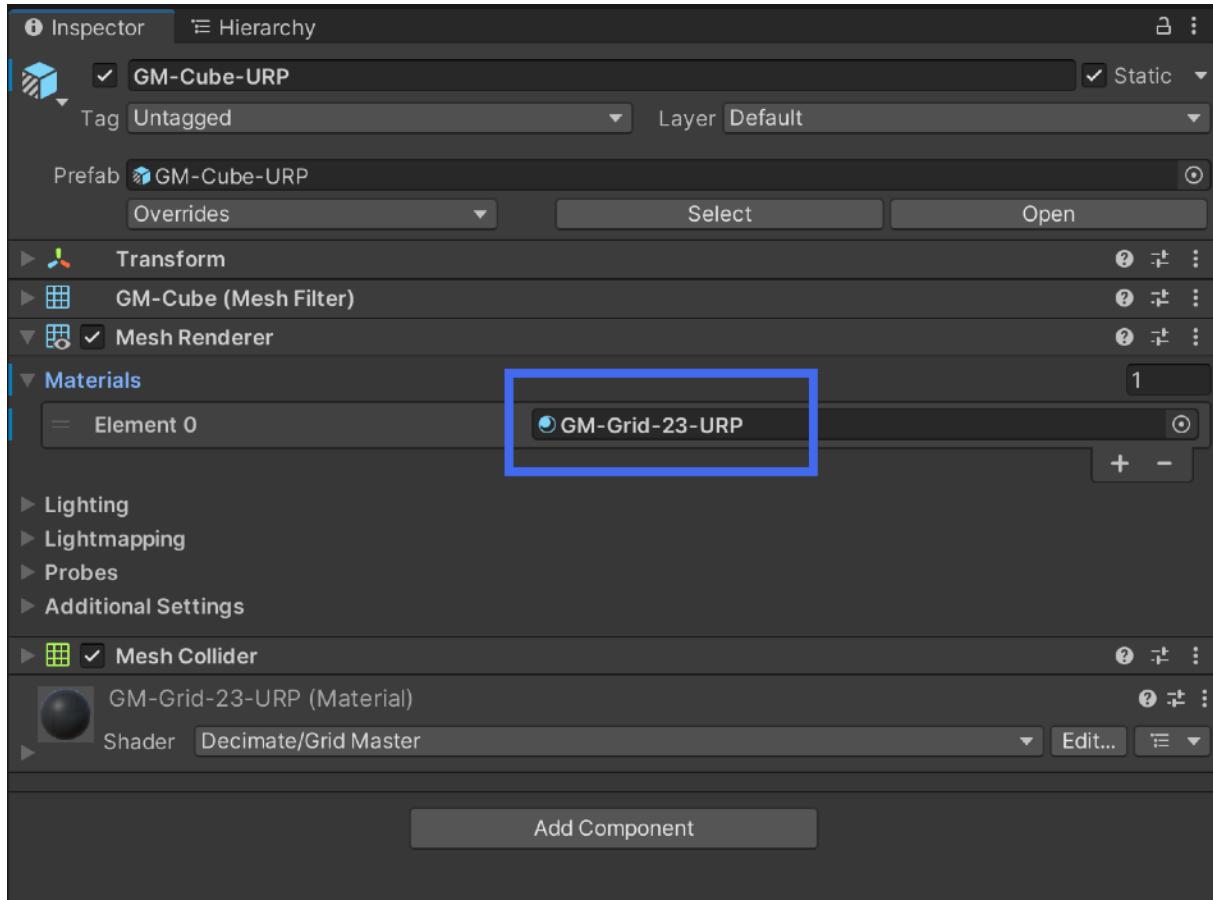
Grid Master comes with a number of Example Materials. These can be found in the **Grid Master > URP > Materials** directory.

Drag a sample material onto a 3D Prefab in the Scene View. You also have the ability to edit the material settings as needed.



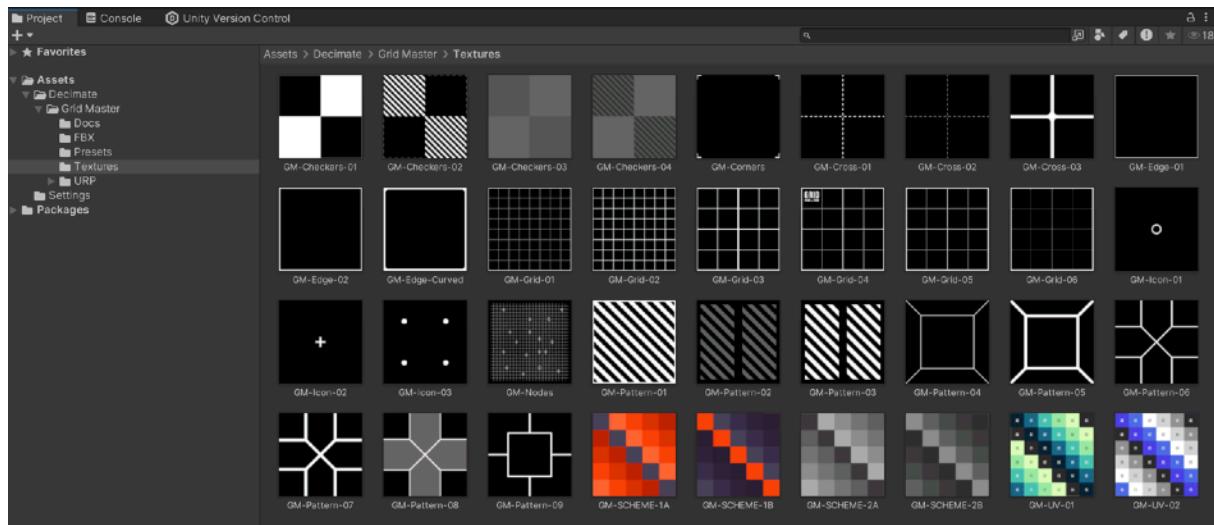
Sample Materials

With a 3D Object selected, drag a **Grid Master** material into the "Materials" slot, in the Inspector Panel.

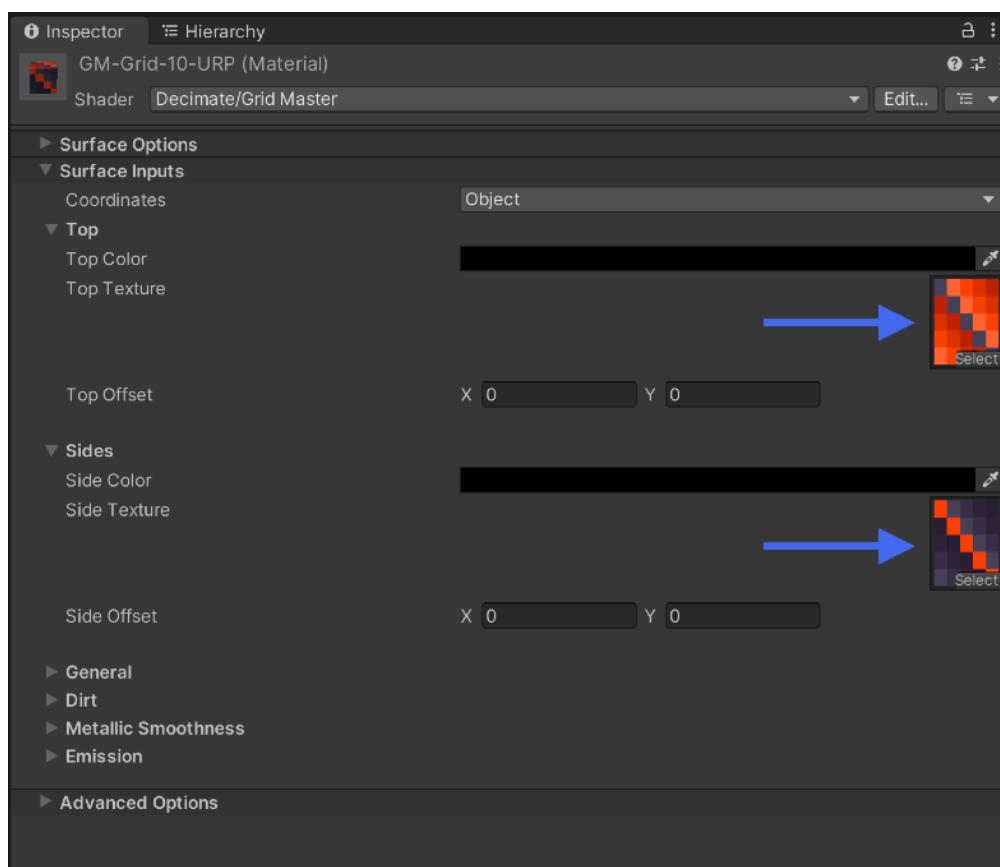


Textures

Grid Master includes a small collection of textures, which can be found in the **"Grid Master > Textures"** directory. All textures are PNG files 2048 x 2048px.

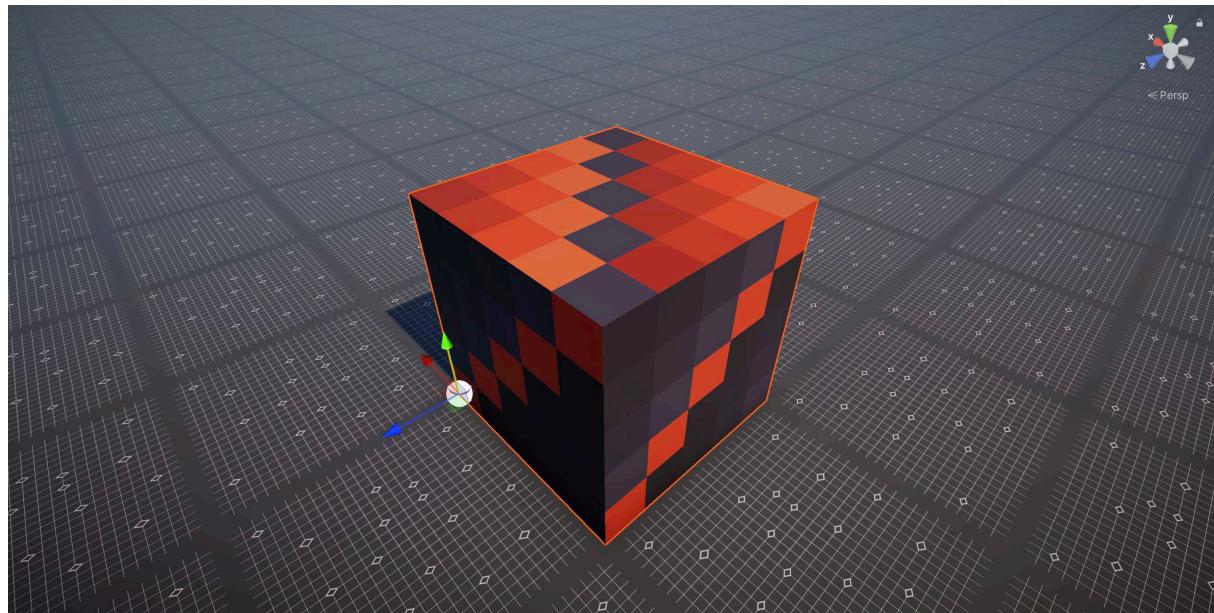


To use the textures, first select a material, then drag the texture into the Inspector. There are separate inputs for the Top and Side Textures.



Textures

This gives you the ability to have a different texture on the top and sides.



Useful Resources

You can create your own grid textures to use in **Grid Master**. Here's a few resources to help get started.

Shape Factory

This is a great resource for generating color palettes.

<https://pigment.shapefactory.co>

UV Checker Map Maker

Create your own custom UV maps, to match your brand colors.

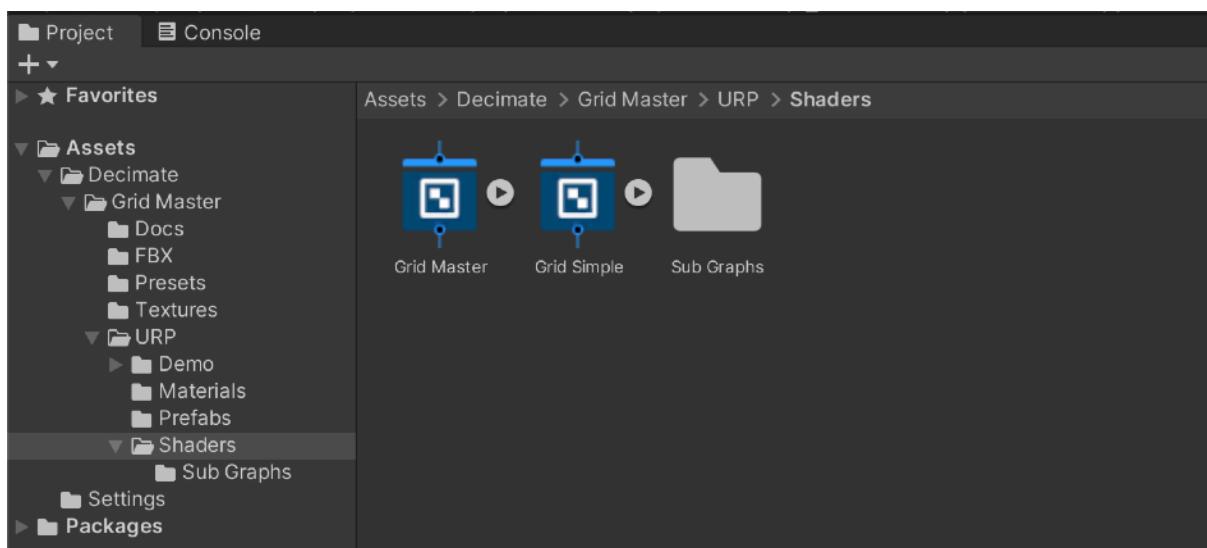
<https://uvchecker.vinzi.xyz>

Shaders

Grid Master includes two Shader Graph assets and a Sub Graph.

The main Shader Graph assets is labelled **Grid Master**. There is also a secondary, more simplified shader labelled **Grid Simple**.

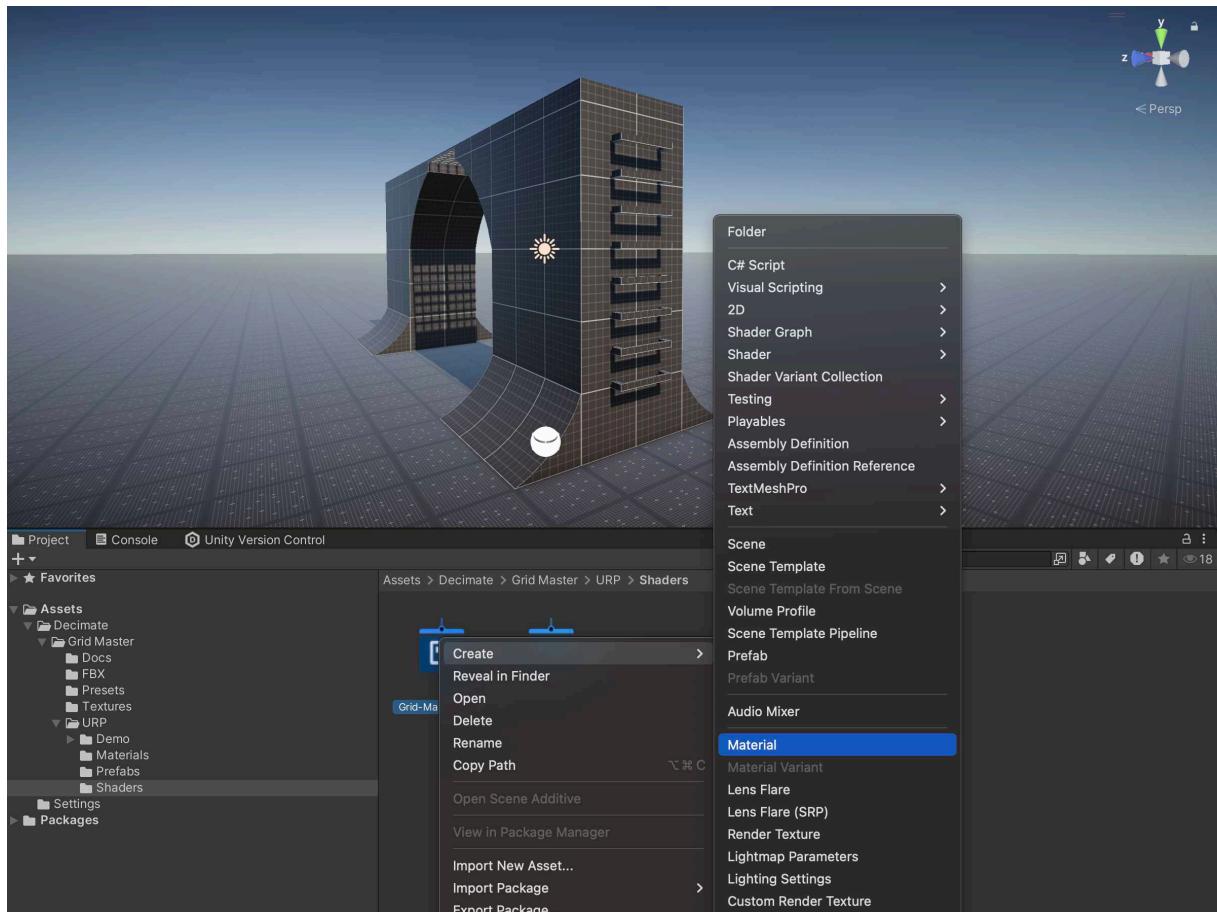
These are both texture based shaders, as opposed to procedural pattern shaders.



Create Material

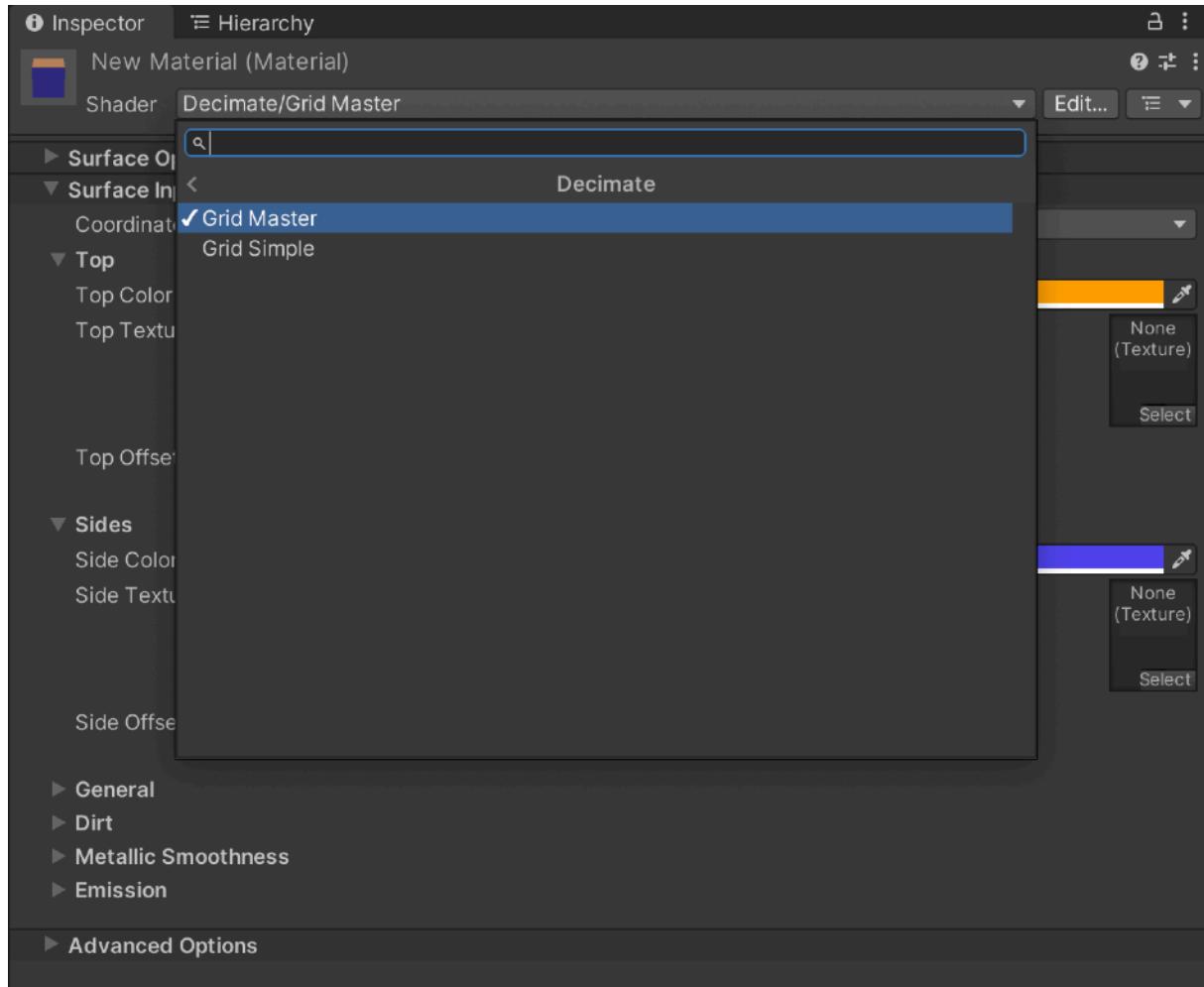
To create a new material, mouse down on the Shader Graph asset and select "**Create > Material**".

That will create a new material, with the grid shader, automatically applied.



Create Material

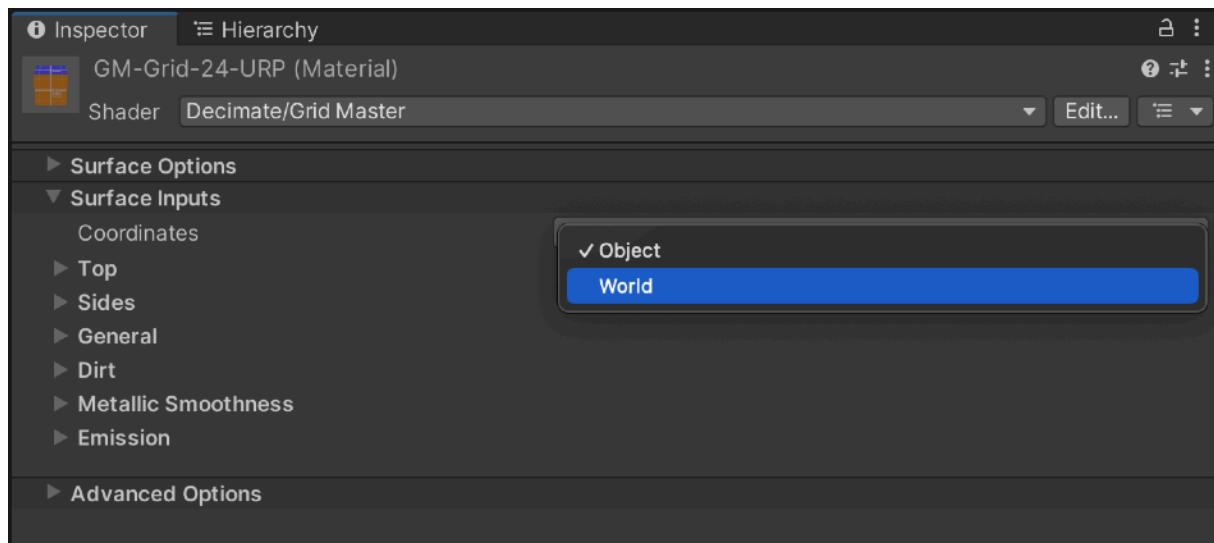
Alternatively, you can convert an existing material by changing the Shader to "**Decimate > Grid Master**".



Material Properties

Coordinates

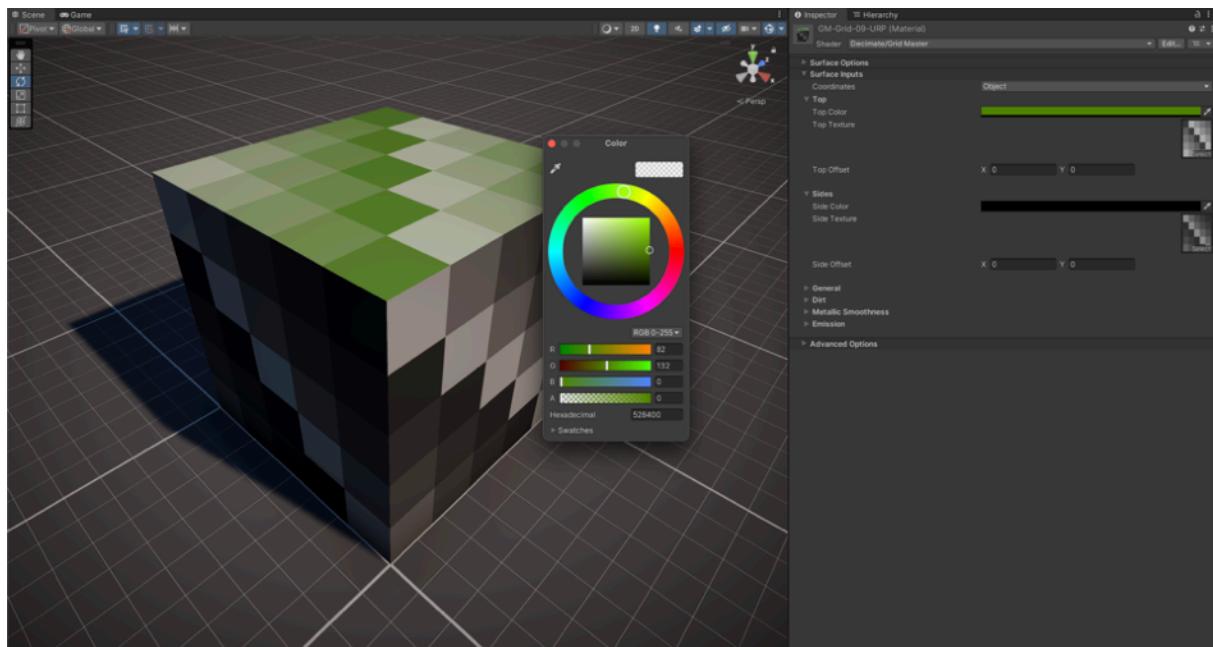
The Grid Master shader allows you to switch between Object and World space. World space can be useful, if you want the top texture to always appear on top, even when the 3D Object is rotated.



Material Properties

Texture and Color

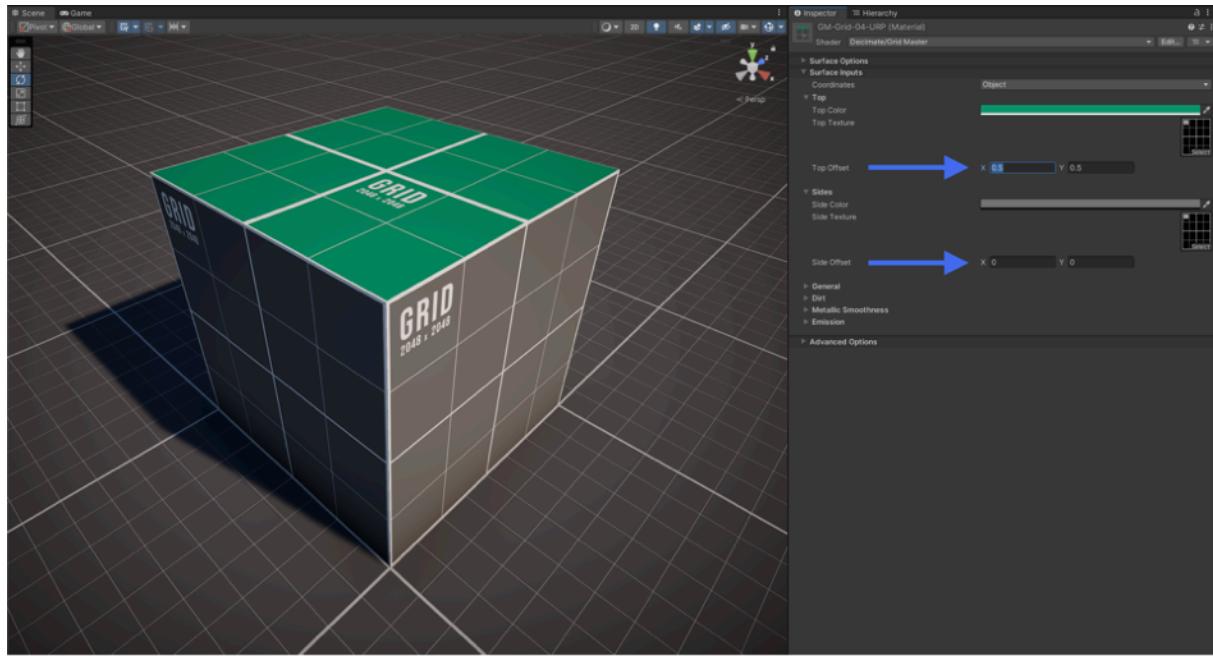
The material properties, contain independent controls for the Top and Sides Texture. This allows you to assign different textures, colors and offsets, for both groups.



Material Properties

Offset

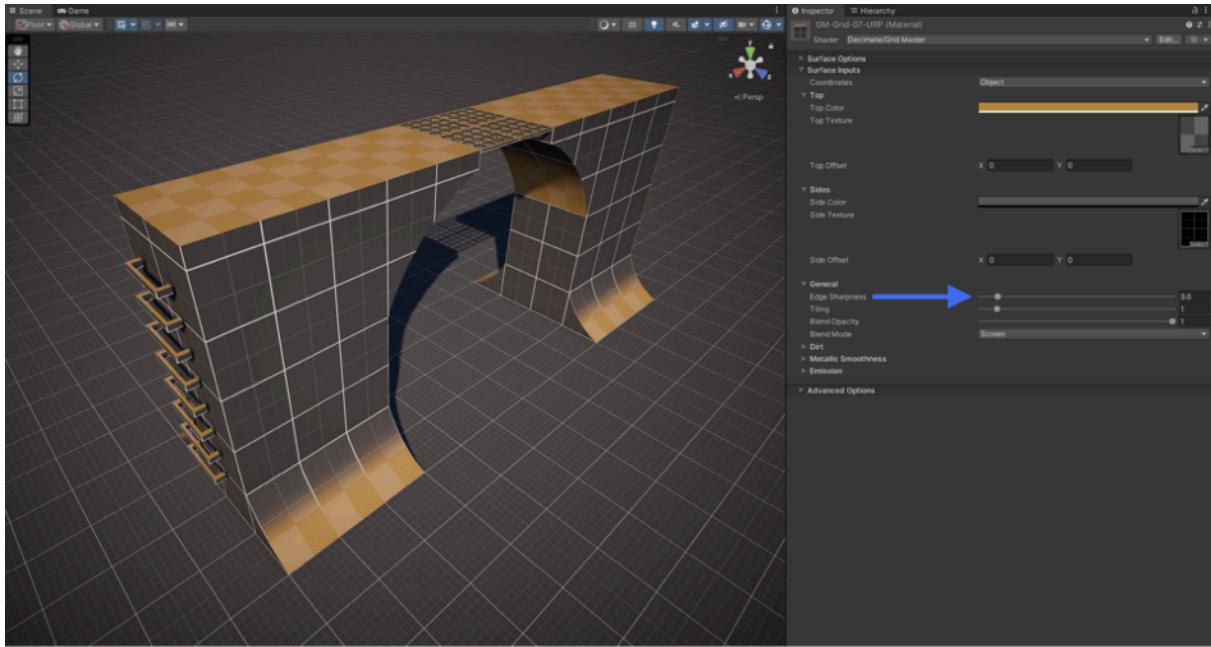
The Offset values allow independent adjustments to the texture position. This might be useful if the texture doesn't line up, as expected.



Material Properties

Edge Sharpness

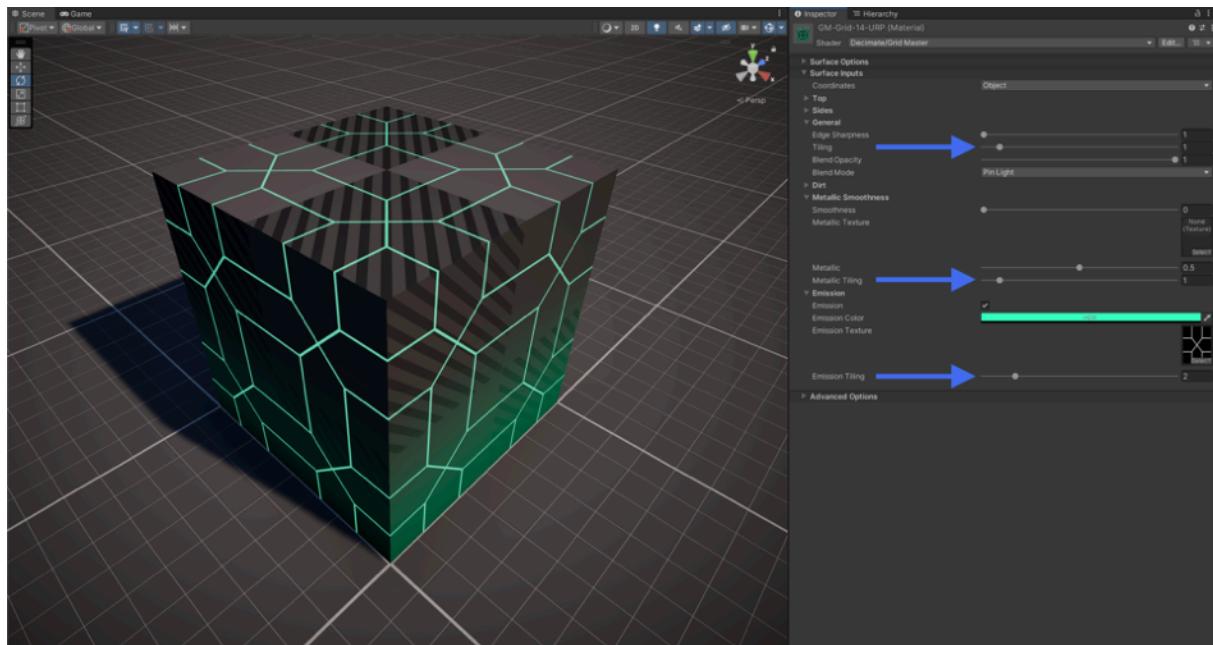
Edge Sharpness controls how sharp or smooth the transition is, between Top and Side textures.



Material Properties

Tiling

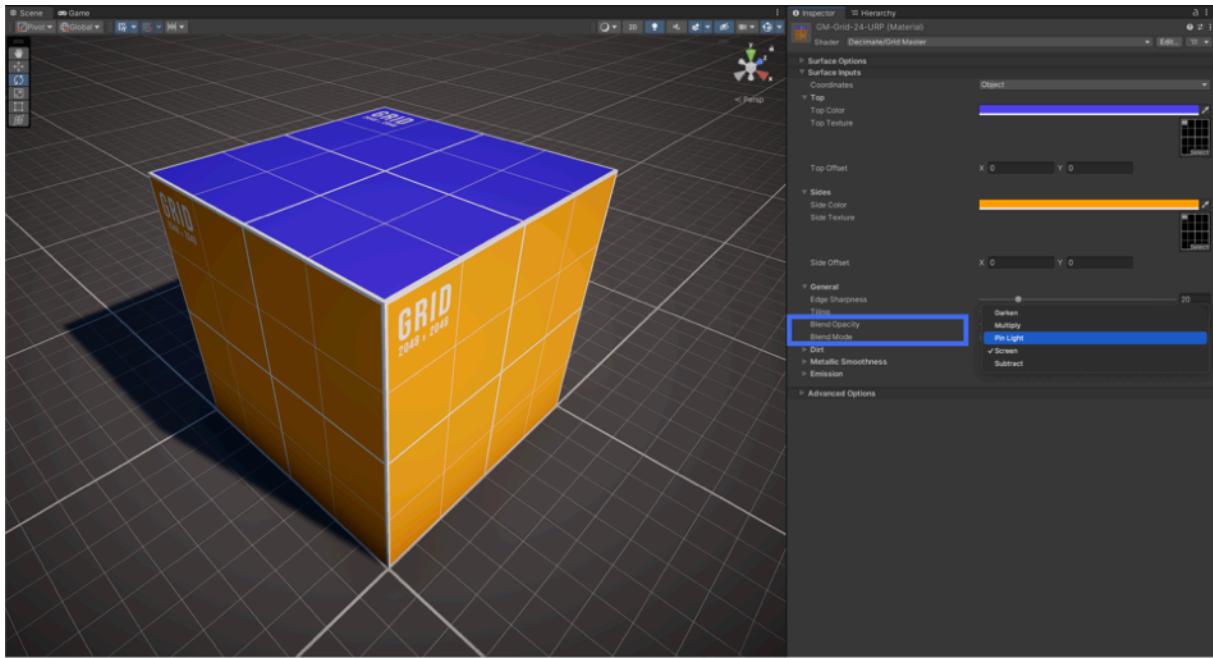
Textures tile automatically in Grid Master. However if you need more control, there are sliders to control tiling for the Color Texture, Metallic Texture and Emissions Texture. These act as tiling multipliers.



Material Properties

Blend Mode & Blend Opacity

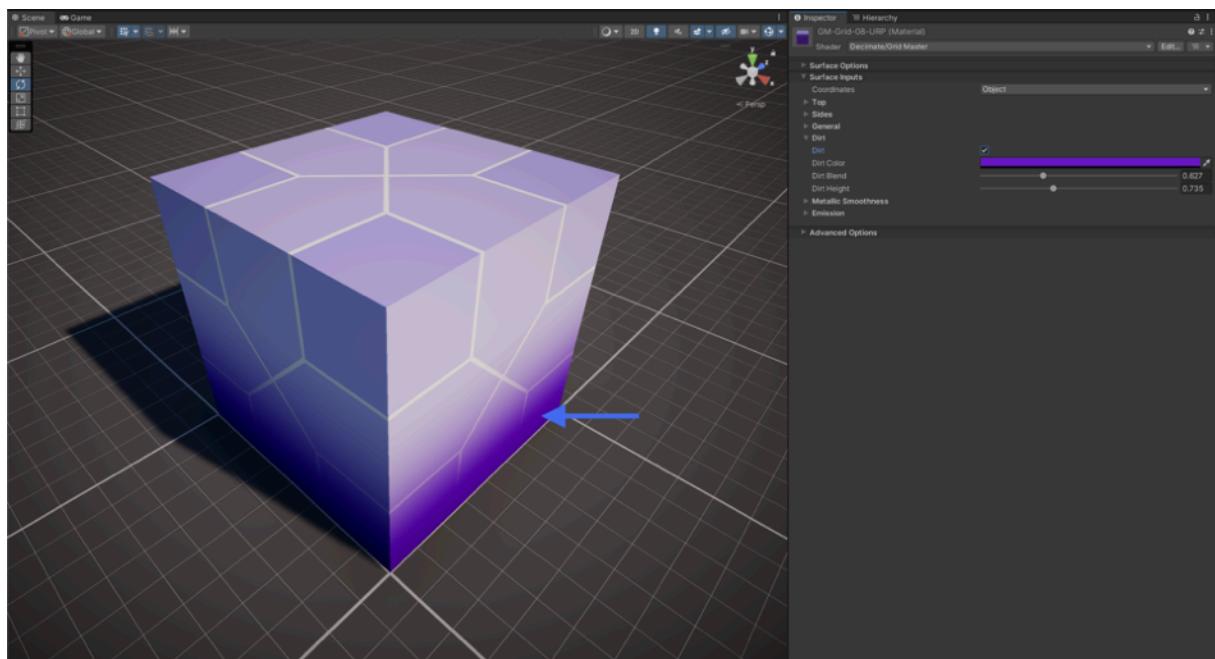
Grid Master allows you to control the Blend Mode and Blend Opacity, with regards to Color and Texture. In most cases "Screen" works best. But there are other options that can give interesting results in certain cases.



Material Properties

Dirt

When enabled, this gives you the option to add a dirt color to the bottom of the 3D Object. This is only be visible if the object is positioned on the ground plane. The shader includes options to control the Dirt Color, Blend and Height.



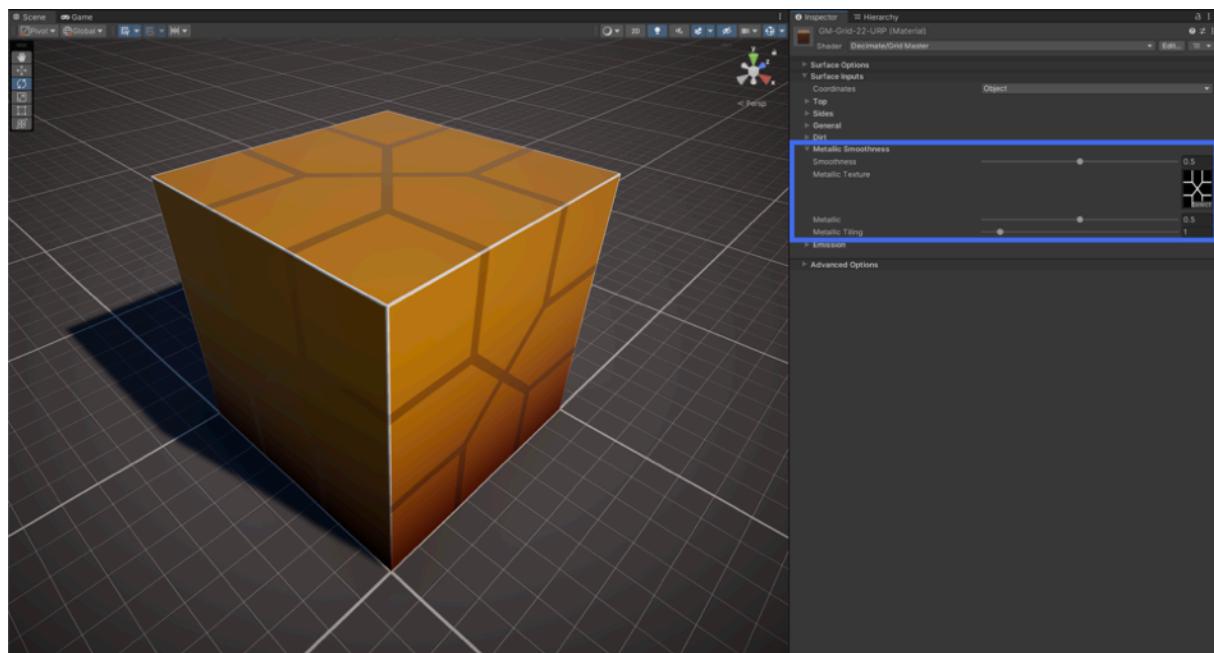
Material Properties

Smoothness

The Smoothness slider will control how reflective the surface is. This is often used in conjunction with the Metallic settings.

Metallic

The material properties, include an option for adding a texture to the Metallic channel. You will need to increase the Metallic value above 0, to see an effect. This can be useful for adding, subtle details to a grid material.



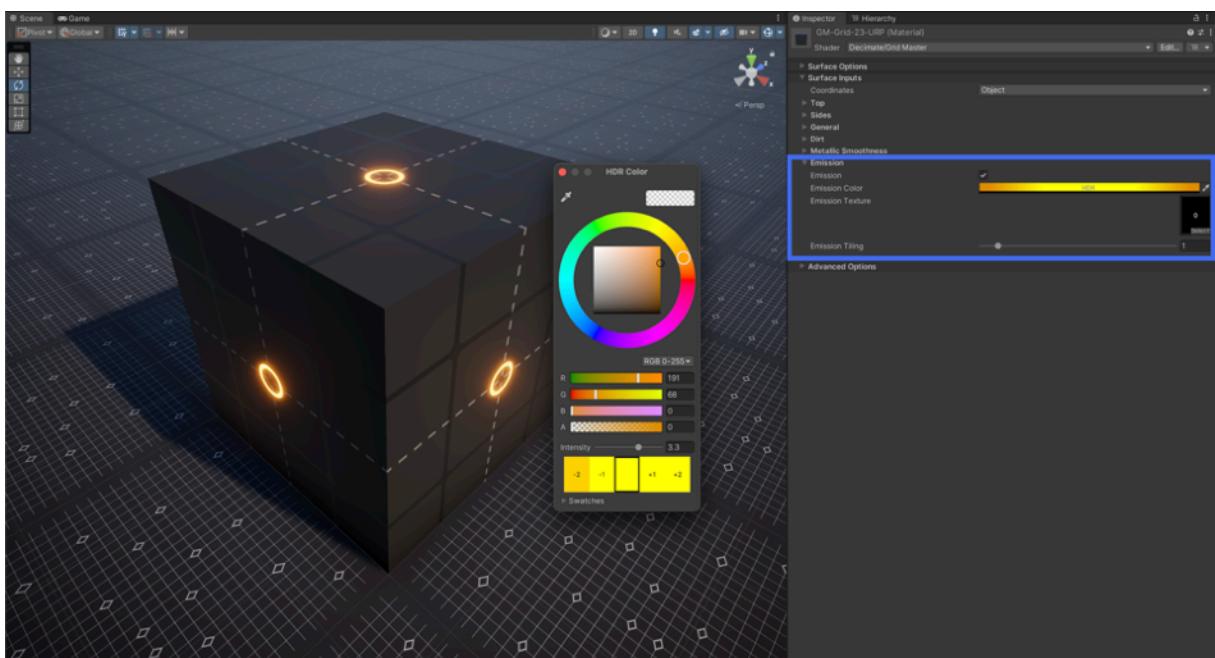
Material Properties

Emission

The material properties, include an option for adding a texture to the Emission channel.

To get this working, enable the Emission checkbox and select an Emission Color. Ideally you want a HDR Color with an Intensity value above 0.

To get the Bloom effect, you will need to setup [Post Processing](#).



Contact

Support

If you need support, or want to submit feedback, contact me here
<https://decimate.com/support>

Social Media

YouTube

<https://www.youtube.com/decimate>

Website

<https://www.decimate.com>