

Shader Guide

Bottom Layer

The purple slots specify the textures for the bottom layer of the shader. Only the base color with default uvs is visible in the viewport, to see the full shader you need to do an IRAY render.

Displacement is only available for the bottom layer. In addition, the displacement is not affected by the blend masks, and as a result if you use a displacement map it will show through the top layer as well. This is ok for some situations, such as brick covered in moss because its fine to see the brick displacement under the moss. However if you are trying to blend two distinctly different materials such as cobblestones and flat asphalt, it will look weird because you will see the cobblestone displacement in the asphalt. In those situations, I would recommend relying on good normal maps and not using displacement.

Similarly, if you are using emissive textures, while these are affected by the blend mask, at high luminance values it is possible for the emissive to bleed through the other layers.

Bottom Layer UV Controls

In order to add the ability to rotate the uvs, these shaders use a different method to control the uvs than the standard Daz shaders. The tradeoff is that the UV changes are only visible in the iray render and not the standard viewport.

Since UVs are unwrapped flat, only the X and Y slots are used are used for tiling and translations. Entering values in the 3rd slot won't do anything for tiling and translation. For rotation, only the Z axis is used to rotate the UVs. This number is measured in degrees from 0-360. The X and Y slots aren't used.

Top Layer

The blue slots specify the texture slots for the top layer. The top layer accepts all the same textures as the bottom layer except for displacement. Please note that using a cutout opacity map will allow you to see through the mesh, rather than revealing the bottom layer.

Top Layer UV Controls

All of the top layer textures are controlled by the top layer uv controls and allow you to tile/translate/rotate completely independently of any other layers.

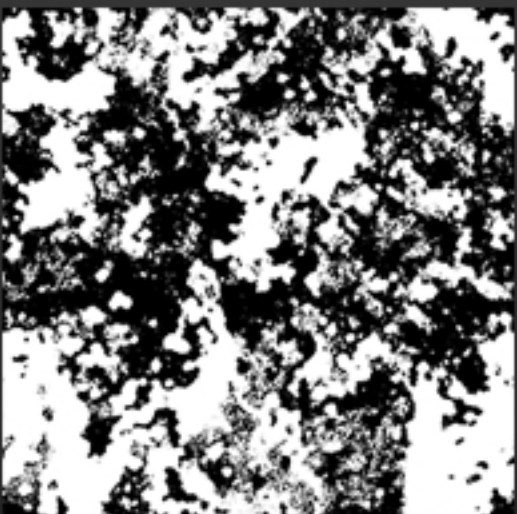
Blend Masks

The red slots specify the blend masks that determine how the top layer blends with the bottom layer. Using both masks will combine localized detail and a larger pattern, but you can use either one without the other if you want to.

The bottom layer mask uses the bottom uvs. Use this mask to specify the localized detail of the blend. White pixels will show the bottom layer, while black pixels will show the top layer. For a brick texture for example, if you want to blend in the cracks, you would paint black in the cracks and white on the bricks. If you wanted moss to only grow on the exposed bricks you would paint black on the bricks and white in the cracks. Using the height map or roughness map and increasing the contrast is a good starting point to create this mask.



The blend mask should specify a larger random grunge pattern that you want to break up the blend with. White pixels show the bottom layer, and black pixels show the top layer. Gray will result in a softer blend.



In the shader, the bottom layer mask and the blend mask are multiplied together to create the final mask. The blend mask uvs allow you to tile/translate/rotate the blend mask so that you can scale and adjust the pattern to get the result you want and avoid tiling over large surfaces. Adjusting the contrast/pattern of the masks themselves should be done in an image editing program.

Discoloration Layer

The discoloration layer allows you to add a single color overlay with it's own mask. Specify the mask and adjust the slider to adjust the transparency. Setting the slider to 0 will disable discoloration. After specifying a mask, set the discoloration color to the desired color. You can then set the blend mode to specify how the color will be applied.



The discoloration roughness color allows you to set how shiny the discoloration should be. Darker pixels will make the discoloration more shiny, and white will make it less shiny. You can also specify the blend mode of the roughness.

The discoloration has it's own uv controls so that you can control the placement of the discoloration.

Emission Settings

This is a unified set of emission settings that apply to the combined output of both emission textures. To set the intensity of the glow, set the luminance value in the bottom or top sections.

