## Best Results:

These shaders also function best with at least some light from multiple directions rather than a single strong light source. In other words, I suggest that you have some over ambient or fill lighting in the scene as well as a directional light. My promo images were done an uberenviroment light, a spot as a rim light and a spot light in front of the figure for the main lighting.

For best results be sure to check the tiling scale via a test render before you do your final render. I have included utility files to adjust tiling but they are rather general and you may need to make more exact changes. I have also included detailed information below about tilling and how to work with it.

One last thing to be aware of is that the lighter the surface the less light it can take before it gets over bright. You can lower the specularity on the lighter surfaces if you need brighter lights some to help compensate for the bright lighting.
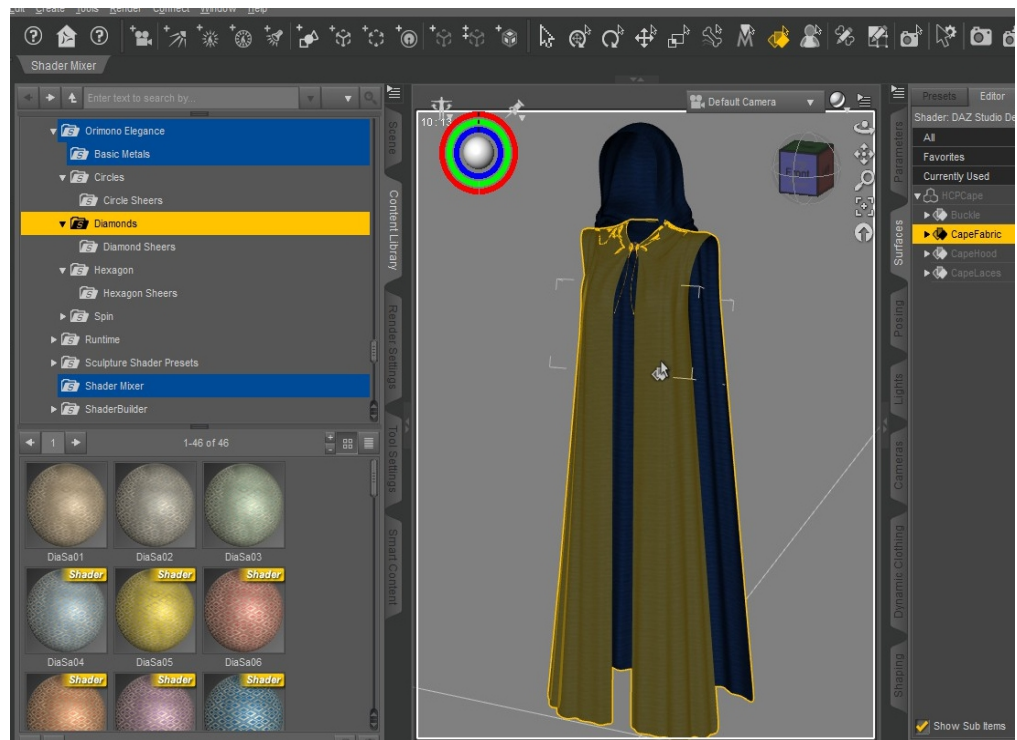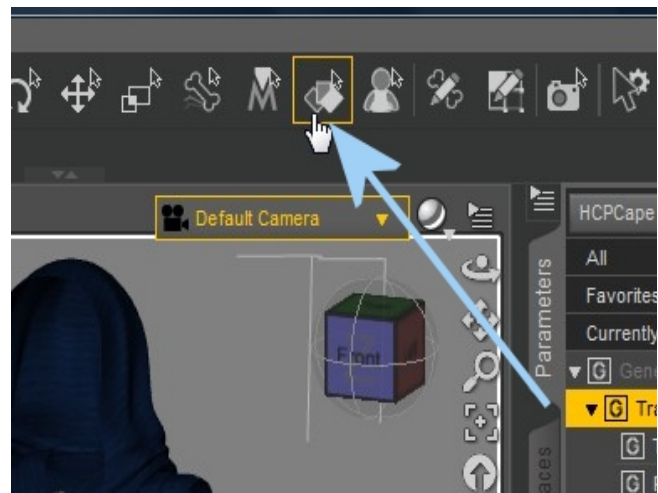
## Applying Shader Presets:

Shader presets are similar to material presets that often come with products. They are a bit different in two ways. Shader presets are created so they can be used on nearly any surface you choose and in order to have them load onto the surface properly you need to have both the object and the surface selected.

In Studio 4 the easiest way to select both the surface and the object at the same time is use the "Surface Selection Tool". It looks like three little rectangles one on top of the other.

When you select it from the tools and hover the selection arrow over the surfaces they will change color and you can click down to select the surface.

Once you have clicked to select the surface it will be highlighted in the surface tab. Then you simply double click on the icon of the preset you want

to use and it will apply to the surface.

If you want more than one surface to have the same shader preset you can hold down the ctrl button (in windows) to keep adding selections.
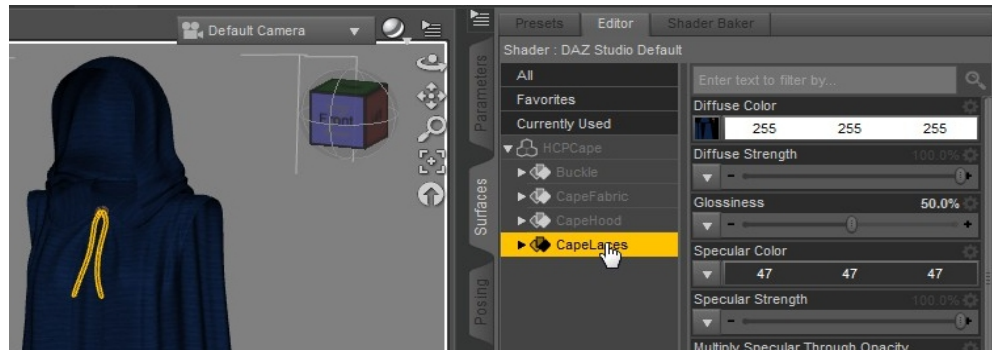
You can also select your surfaces directly from the surface tab.

Often if you are planning to select multiple surfaces this is faster. If your going to be applying the same shader preset to the whole object you can select the top level (the object name) and all of the surfaces will be highlighted.

## Tilling and Scale:

All of these shader presets are based on textures in one way or another. Because of this you may need to adjust the scale via the tilling. When this needs to happen depends on several factors. First of course is personal aesthetics and what the scene calls for. You may want a large bold pattern or a tiny pattern. The second factor is how the object was UV mapped and how much space each material takes up on the UV map.
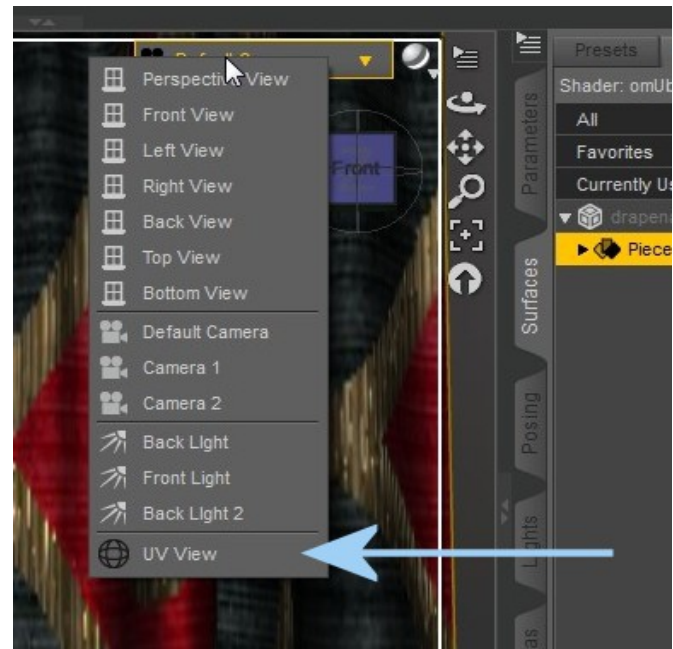
One way to check this is to look at the way the surfaces were UV mapped via the UV view in studio. To do this just click on the little camera and get the drop down that you use to change views.

If you go down to the bottom of the list you will see UV view. Selecting that will give you a view of how the UV map looks.

When you look at the map remember that the larger the material area is the larger the tilling will likely be. The reverse is true for things that take up a smaller section of the map.
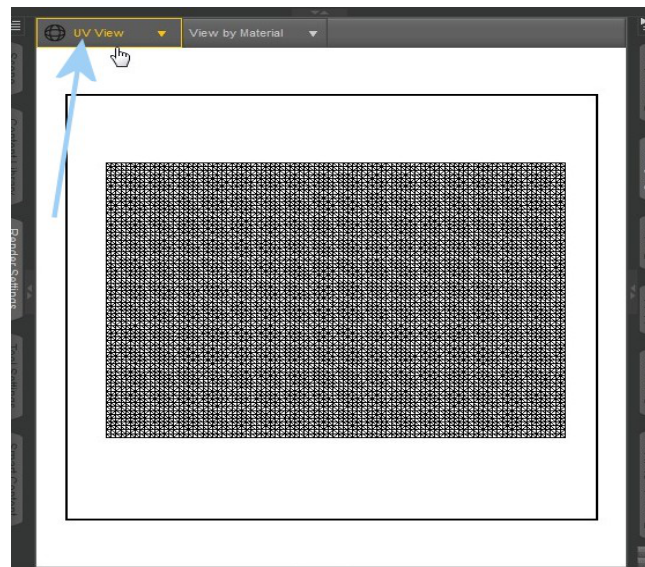
You may also need to make adjustments based on

how "to scale" the object was mapped. Many content creators do a good job of keeping all the components of an object to the same scale. However there may be some that you run across where the scale from section to section seems a bit random. When that happens your going to have to adjust each section until they are all the same scale.

I have included utility files for continence but you may need to know how to make adjustments yourself.

To adjust the tilling you will need to open the surface tab. Be sure that the object is selected in the scene and then select the surface/s that you want to make adjustments to. For adjustments from 1-10 you simply click the number and type in a new one or you can use the sliding scale.
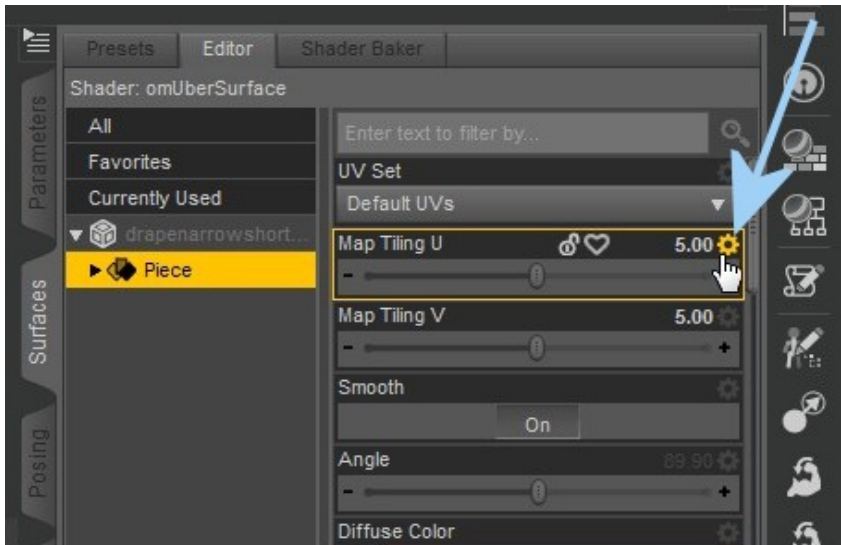
In some cases you will want the tiling to be higher than the parameters seem to go. If you need the tiling to be higher than 10 you can always up or remove the limits on that setting.

You will need to scroll down till you find the "Map tiling U" and "Map tiling V" in the surface editor. At the far right end of each will be a little gear. When you click on the little gear you will get a pop up. You are going to want to select the "Parameter Settings" from this list. Clicking this will give you a small window that you can make adjustments in.
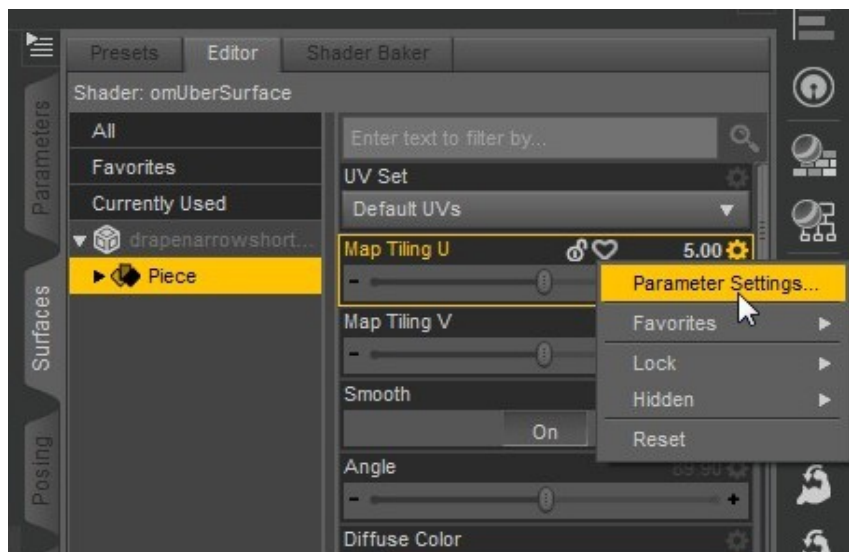
The parameter settings will give you a wide variety of information but the only ones you need to be aware of are "Max", "Value", and the "Use Limits" check box.

What number is in the max slot is maximum number of times the texture can be tilled. In other words it is how high you can ever go.

Value is the current amount of tiling that the preset has set. If you change the value in the surface tab it will change here. You can also change the value here and it will be changed on the surface tab.

Lastly you can change the "use limits" check box to remove any limits. Simply click on the check mark in the box and it will be removed.

If you have used one of the utility presets that goes over the normal limit setting (10) you should be able to make further adjustments without needing to open the parameter settings.
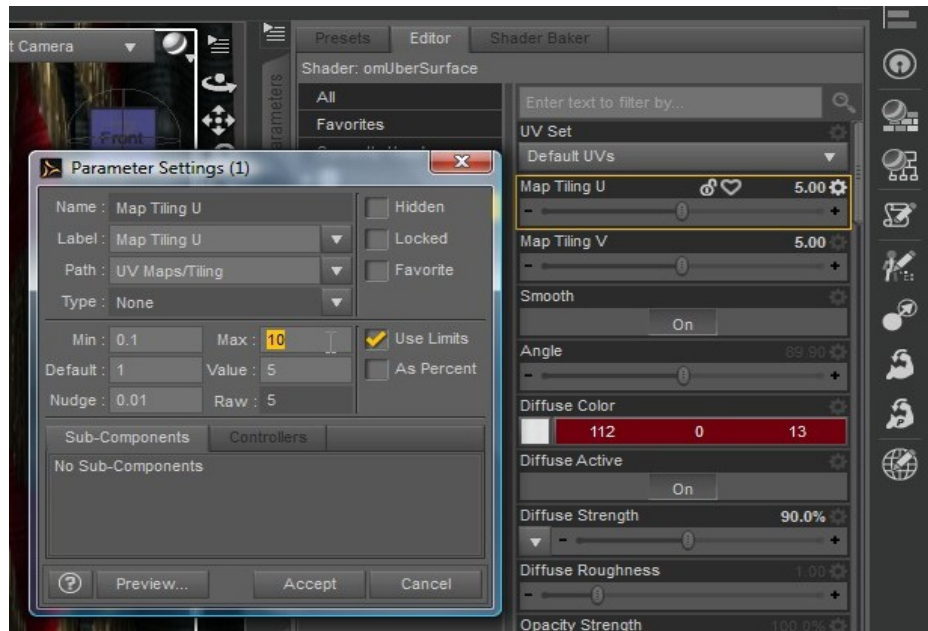
## Reflection

The "embroidered" effect of these shaders are strongly reflection driven. For ease of use and render speed they are all set up with mapped reflections. For a different effect you may choose to swap them over to mapped reflections. I have included utility files for changing to raytraced reflections and back to mapped reflections.

If you choose to use the raytraced reflections remember that they render time will be increased and that you will need to have something in front of and to the side of the object the reflection is on so that there will be something to reflect. Don't forget to have this object(s) lit in some way. What is reflected will impact how the textures look in a final render so your results will vary.