

# Fuzz Parameters



In the parameters below, some of them can be overridden by a [PxrLayer](#) when connected to the **Input Material** or through a [PxrLayerMixer](#). [PxrLayerSurface](#) is designed to better illustrate which parameters are not able to be overridden in a layer by including only parameters that are global. We recommend this material when you know you will be layering. The results of these settings are unchanged.

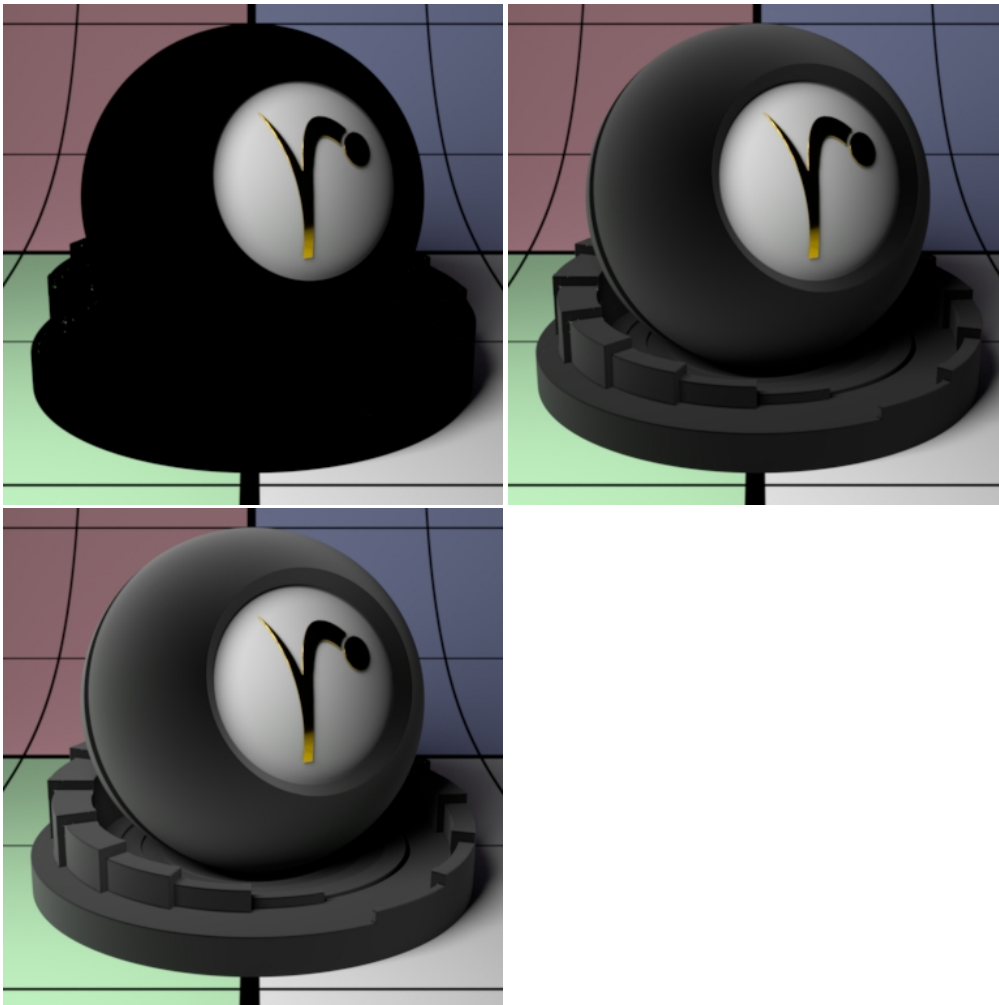
- **Bold Face** parameters are layerable, able to be overridden per layer.
- *Italicized* parameters are not able to be layered or overridden. These are globally obeyed for all layers. For example: Choosing GGX as a specular model will mean all layers will be GGX for that parameter.

## Fuzz Parameters

This parameter introduces a bit of retroreflection and helps simulate fabrics, fuzz, and fine powder.

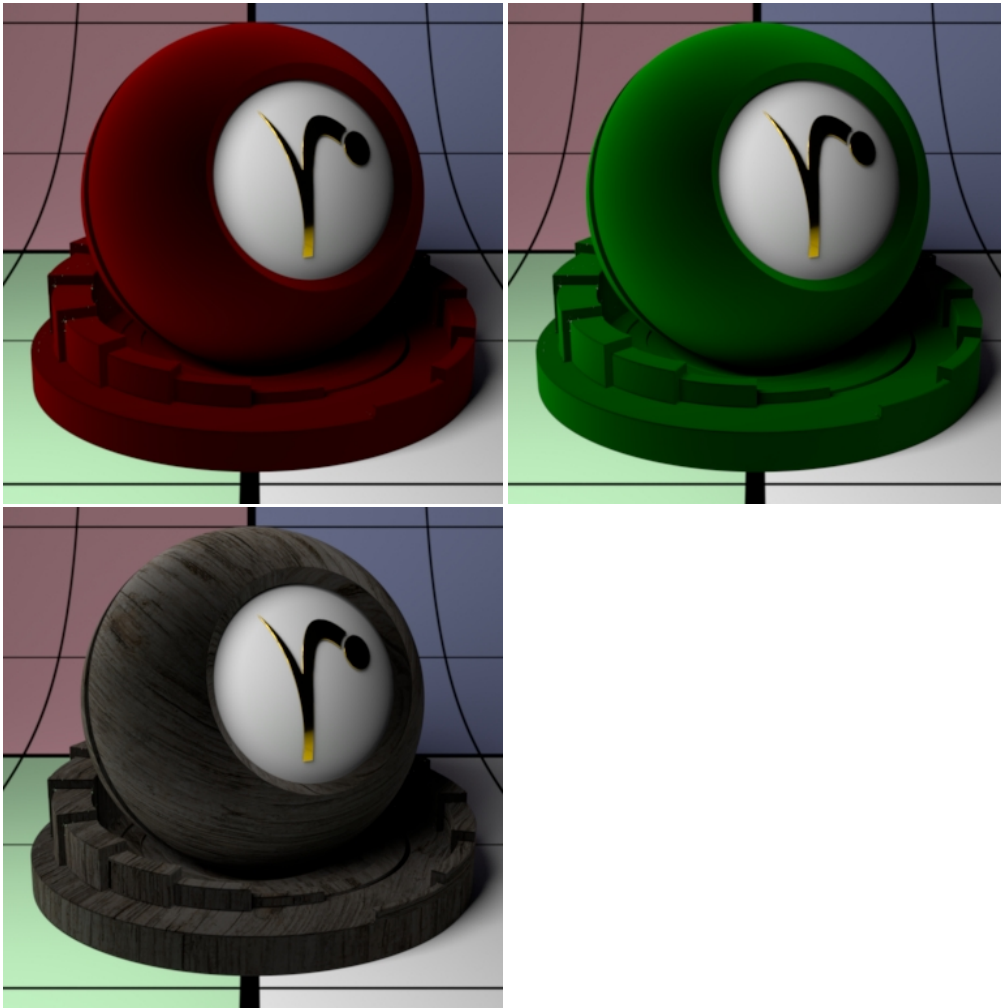
### Gain

Fuzz weight. Higher numbers increase this effect. Below the **Cone Angle** is set to 16.



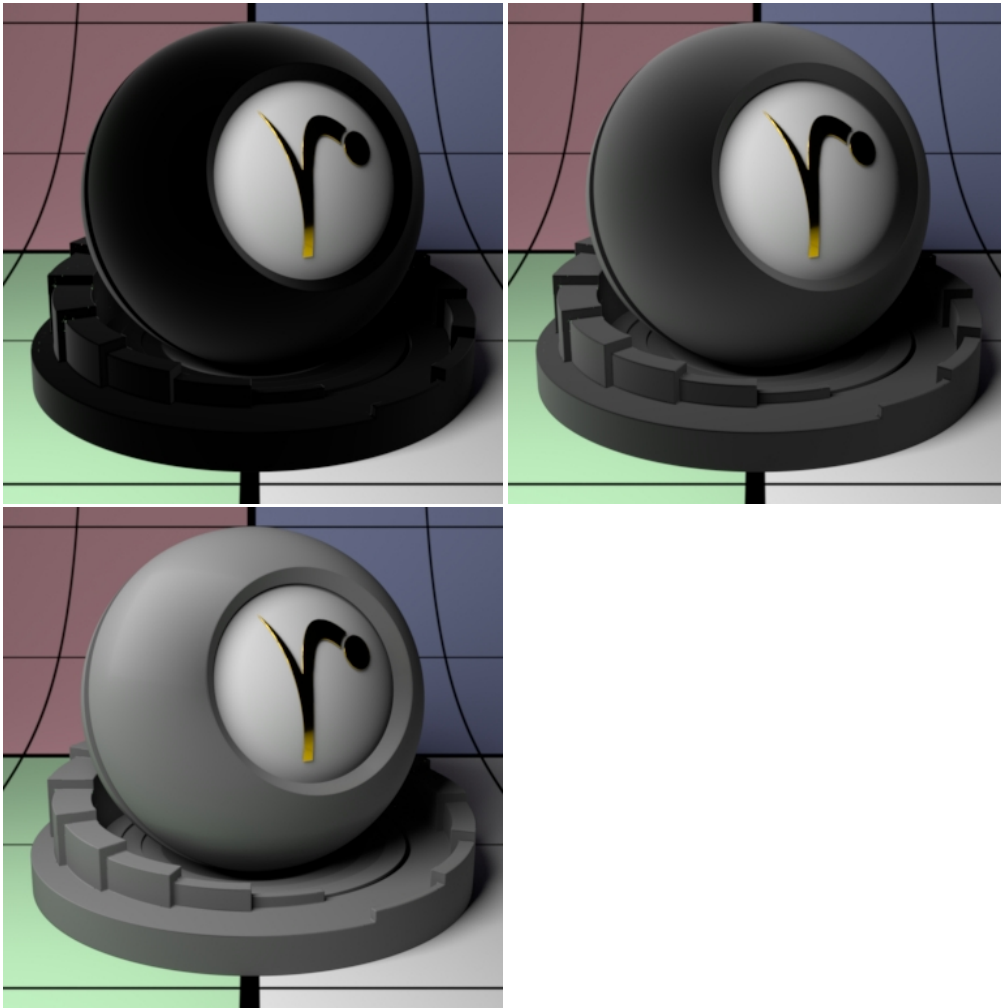
### Color

Fuzz color. This simulates a soft velvety-like effect. This is applied "on top" of the previous Specular lobes and may resemble dirt or fine dust. Below the **Cone Angle** is set to 16.



### Cone Angle

Fuzz roughness (corresponding to Marschner R cone angle). Note that we use something from Marschner's hair model here. This helps to simulate a similar response to hair/fur. Higher numbers increase the effect at facing angles. Below are values 8, 16, and 20.



### Bump

Normal to use for the fuzz illumination. If this is not set, it will use the global bump normal specified in the Properties near the bottom of this page.



### *Double Sided*

If on, illuminate on both sides of the surface for this fuzz lobe, that is, this will illuminate the surface whose normal is pointing away from the camera as well.



**RenderMan Fundamentals**

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