

Chapter 4- Material and Textures

Material Panels:

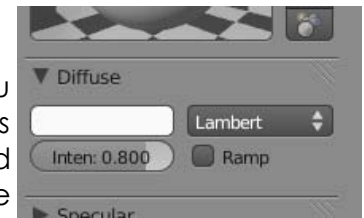
Here are some of the basic material panels and settings:

Diffuse:

Diffuse is actually the color that is given off by the object. If you want the object to be red, set it here. You will also see settings for the way the material is calculated (default-Lambert) and the intensity slider. The Ramp button will allow diversity of color.

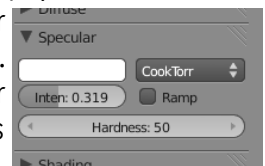


By clicking on the color sample in diffuse (or in any other block dealing with a color), the color wheel will pop up. You can set the color using the wheel and light/dark slider, setting in manually using RGB, HSV, or Hex numbers. You'll also see an eyedropper for picking a color elsewhere.



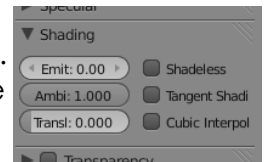
Specular:

Specular settings control the *glossiness* of the object (is it flat or shiny?) You will see a color sample, calculation model and ramp as in Diffuse. The color sample indicates the color reflected back (usually kept white). Intensity controls the amount of glossiness while the hardness slider controls the hardness and softness of the glow. Check the sample as you change these settings to see how it changes appearance.



Shading:

If you want something to glow, even in low light, adjust the *Emit* slider. *Ambient* light allows the object to also react as if indirect light were hitting it. There are also a few other shading settings here as well.



Transparency:

For now, we will only look at using the "Z Transparency" option (Raytrace has it's own chapter). After checking the *Transparency* box and "Z Transparency" selected, you can control how transparent an object is using the *Alpha* slider.

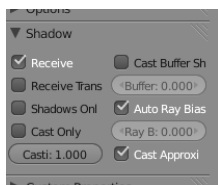


SubSurface Scattering:

Is used to improve rendering for materials where light enters the material and leaves through another point (*like skin*).

Strands:

Strands are used to represent hair or grass when used with particle systems (discussed in a later chapter). With strand settings, you can control the root and tip width of the strand.



Shadow:

There are times when you do not want an object to be able to cast a shadow and times when it doesn't receive shadows properly from objects with transparent materials or ray-tracing features. Those options are controlled in this panel.