Opacity Material Functions

Functions to handle opacity values within a Material network.


Opacity Material Functions exist to speed up the handling of complex opacity calculations.

SoftOpacity

The **SoftOpacity** function takes in an Opacity value and then runs a variety of calculations on it to give it a softer feel. It applies a Fresnel effect, depth-based alpha, and pixel depth. The end result causes the object to fade away as the camera approaches it.

Item	Description
Inputs	
DepthFadeDistance (Scalar)	The depth at which objects have completely faded away. Only viable if using the *OutputUsesDepthBias* output.
OpacityIn (Scalar)	This is the incoming opacity value.

Item	Description
FadeDistance (Scalar)	How close you should get to the surface before it starts fading out.
Outputs	
OutputUsesDepthBias	This output causes the object to fade completely away to complete transparency by the time it reaches the distance set in the *DepthFadeDistance* input.
OutputNoDepthBias	This output causes the object to fade completely away as it reaches the camera, meaning there is no offset. This output is 12 instructions less expensive than *OutputUsesDepthBias*.
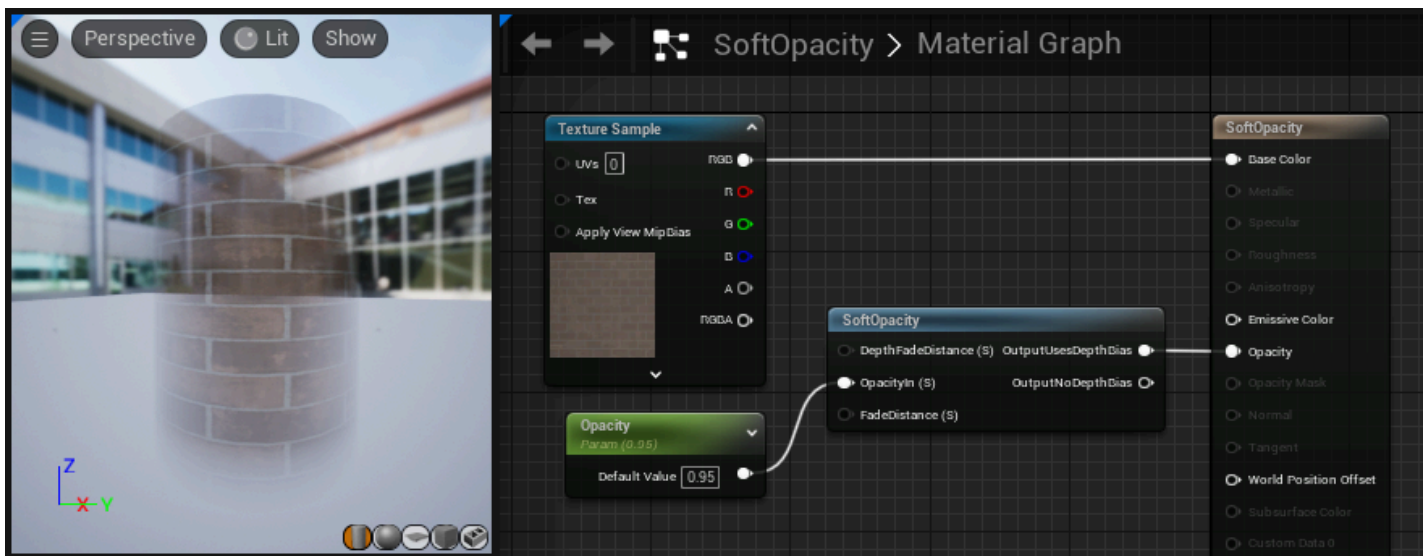
In this example, the cylinder appears more transparent along the edges, where the mesh curves away from the camera. This is due to the Fresnel effect in the Material Function.