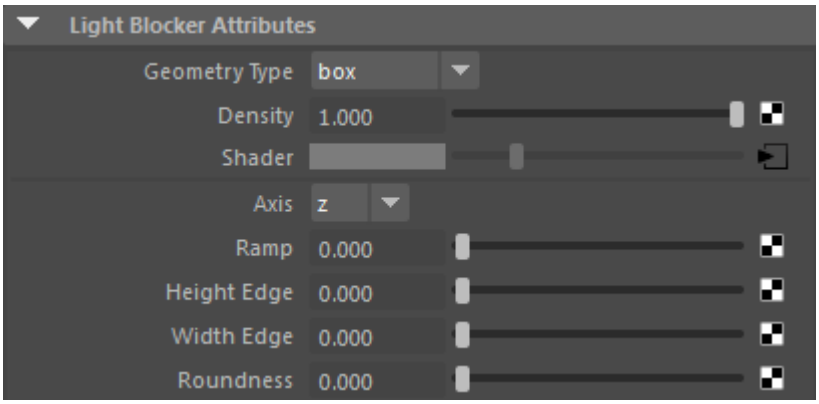
Light Blocker



Light_blockers give flexibility to the lighting TD. They can be used as an artificial method of masking light in a scene without the overhead of adding additional geometry. Used carefully, they provide a degree of artistic freedom, allowing you to define the light boundaries in non-physical ways.

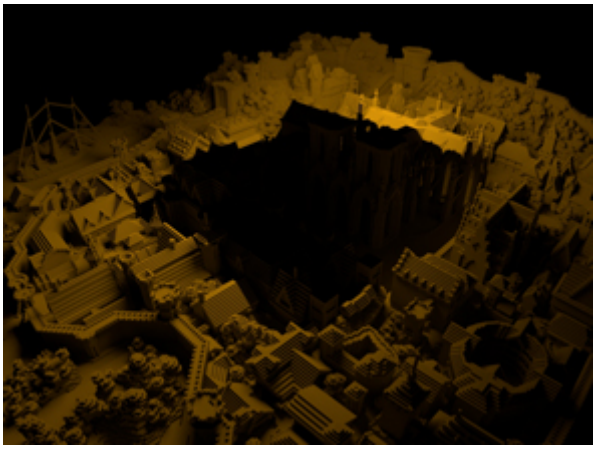
The *light_blocker* is a light filter that specifies a primitive volume defined in the *Geometry Type* (*box, sphere, cylinder*, or *plane*) which when connected to a light node will block or modify the light as it passes through that volume. The blocker will only influence a light it is connected to, just like other filters (i.e. the geometry affects nothing else, including GI, and is invisible). One, simplistic use would be to mimic the effect of a complex lamp housing, (possibly in combination with the *barndoor* filter) without modeling the lamp geometry. Another use would be to create shadows in your scene that look different from how they normally would.

> A video showing the Ai LightBlocker in use can be found here.

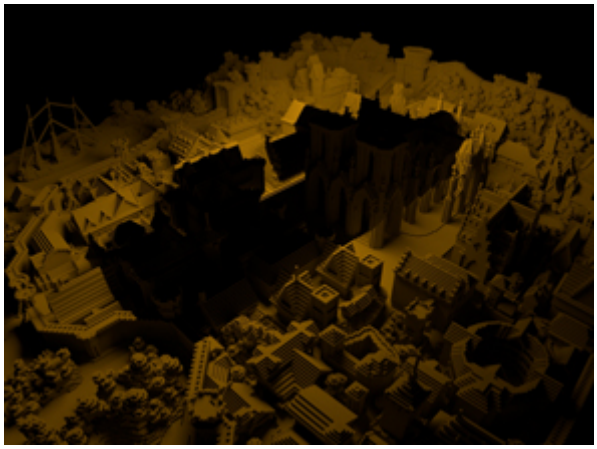
In the following examples, an Ai LightBlocker is connected to an Ai AreaLight. The translation, rotation, and scale of the light blocker are determined by a simple wireframe shape node. By default, the position of the light blocker will appear at 0,0,0.

Geometry Type

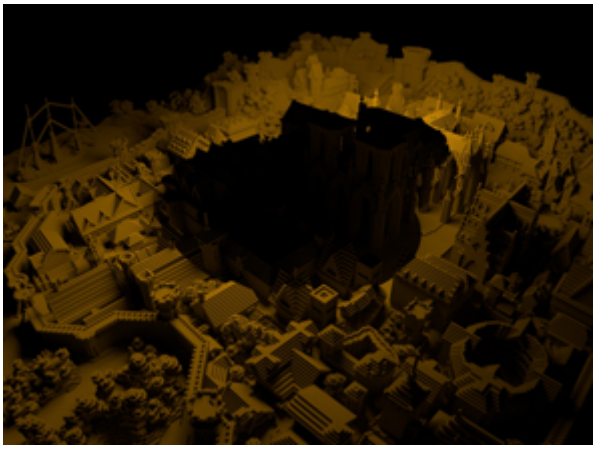
Determines the shape of the blocked light. A light blocker can be a box, cylinder, sphere, or plane.



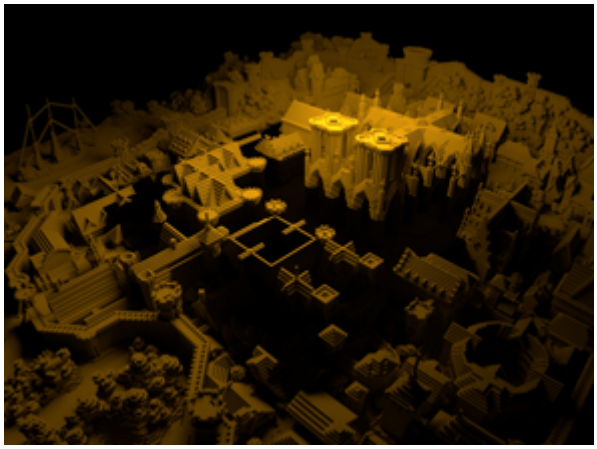
Box. **Rollover image for GUI (Maya).**



Cylinder. **Rollover image for GUI (Maya).**



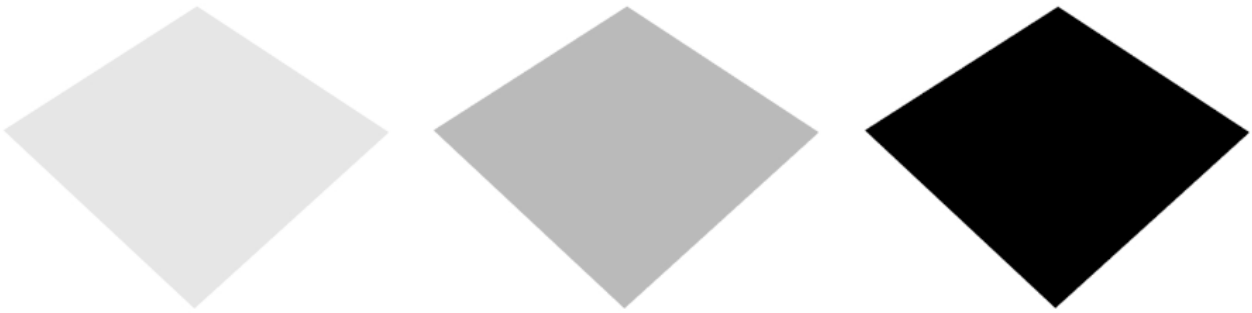
Sphere. **Rollover image for GUI (Maya).**



Plane. **Rollover image for GUI (Maya).**

Density

This value is the strength of the *light_blocker* effect. The *light_blocker* will not be apparent unless the density value is above 0.



0.2 **0.5** **1**

Shader

Plug the output of the shader you wish to use as a masking effect here. For example, a texture map used to represent the shadow of some tree leaves. Unlike *gobos,* you can position a shadow independently of the light transform. It works with all types of lights instead of just spot lights (unlike the gobo which also contributes illumination to the scene). It only works when *geometry_type* is set to *Box.*

Tree mask connected to *shader*. Mask is static when light position changes.

An example scene file can be found here.

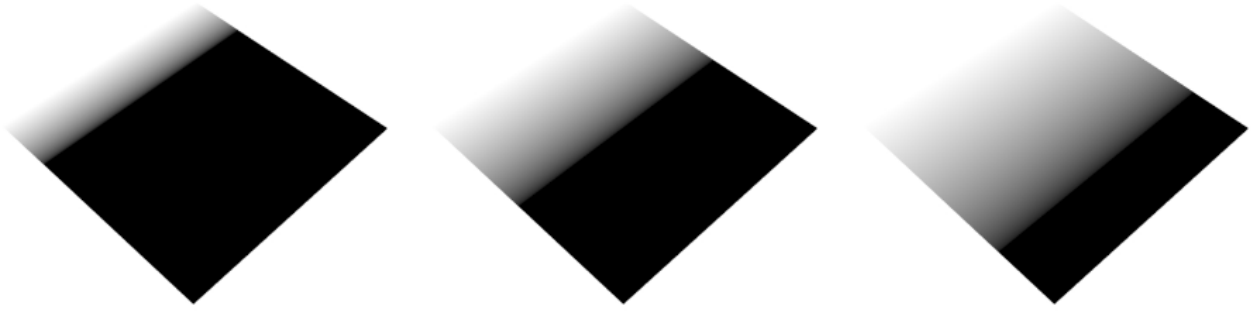
Axis

Attenuates the ramp based on the direction set.

x y z

Ramp

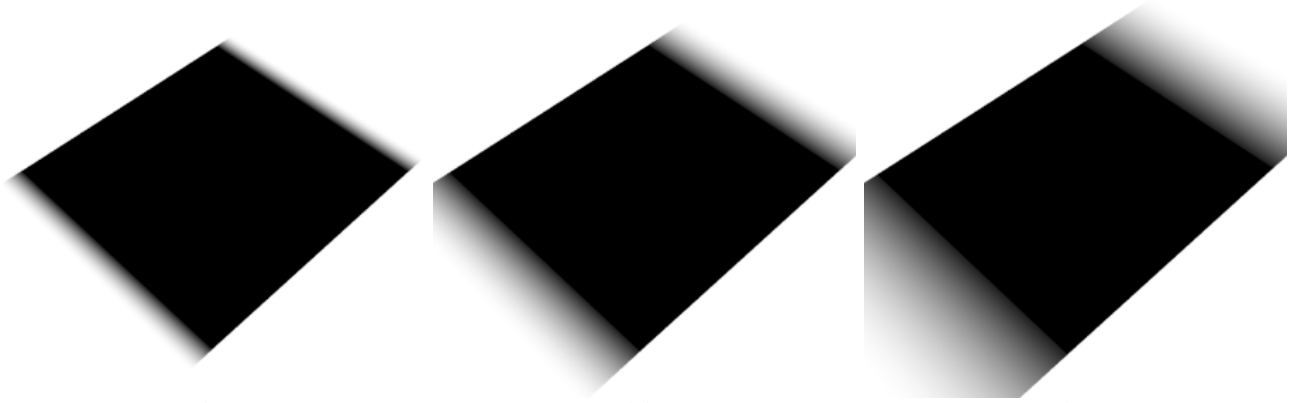
This is the magnitude of the *ramp* multiplier, applying along the *Ramp Axis* direction. Negative values flip the *Ramp Axis* direction.



0.25 0.5 0.75

Height Edge

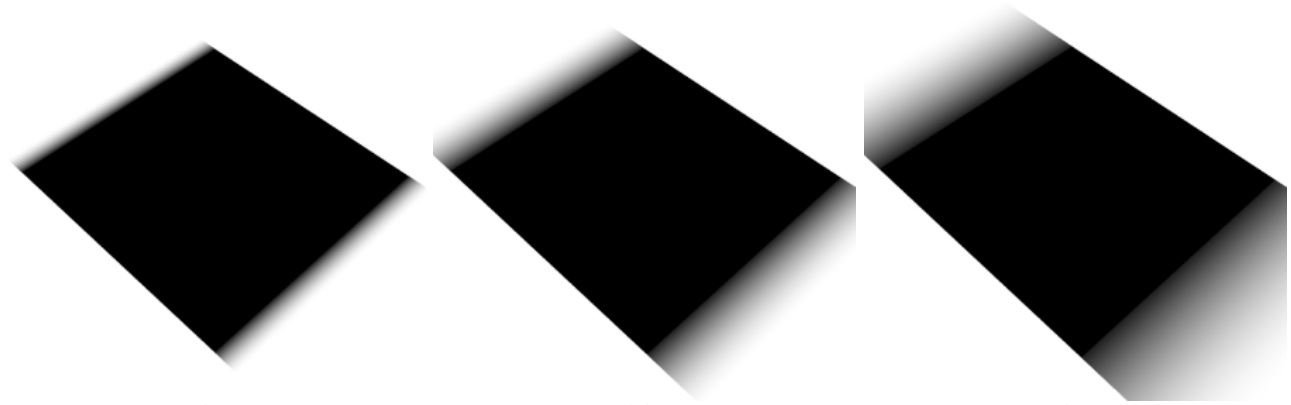
Attenuates the edge of the height of the *light_blocker.*



0.1 0.25 0.5

Width Edge

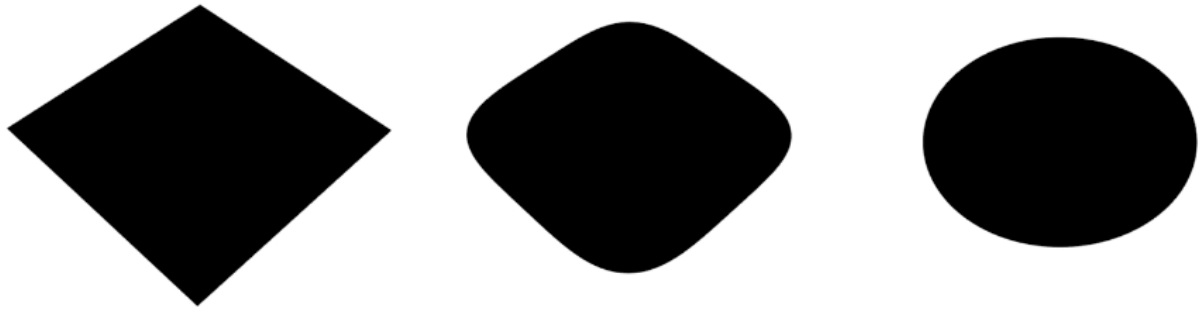
Attenuates the edge of the width of the *light_blocker.*



0.1 0.25 0.5

Roundness

Increases the circular shape of plane light blockers.



0 0.5 1