Reflection Pass

tutorial by noontz, thanks to Martin Hinrichs for input & proof

inspired by : http://fryrender.com/phpbb2/viewtopic.php?t=3167

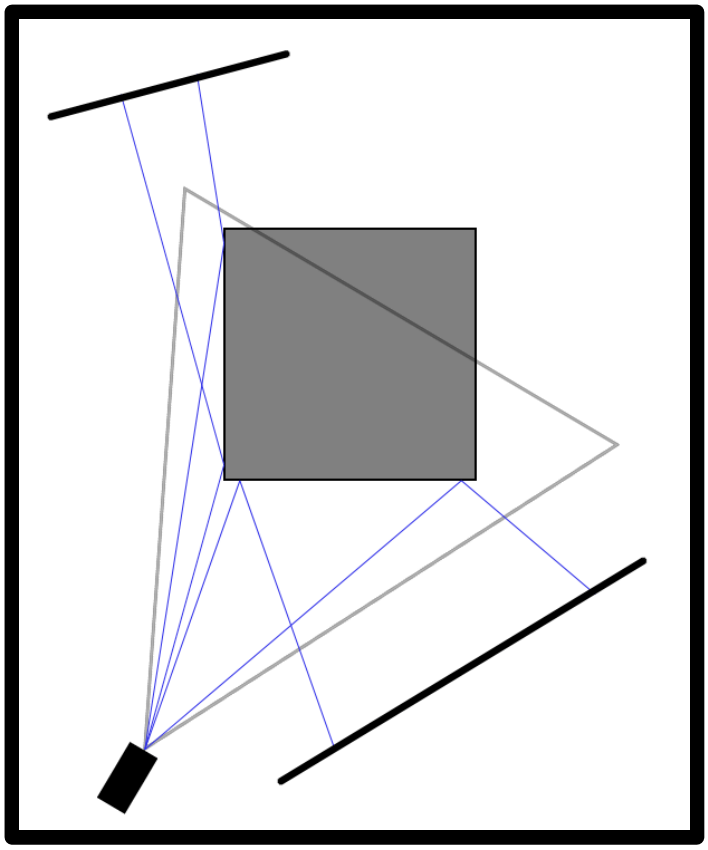
The **Reflection Pass** is recognized in other render engines as a separate render output retaining only the reflections for use in compositing.
In mother nature GI & reflections are the same thing, so in unbiased it is not possible to distinguish between the two. However it is possible to utilize reflection planes and output the reflections to separate layers.

Scene set-up

Position the reflection planes so they will fill out the geometry of interest, when seen as reflections in the camera. To quickly judge the placement of the planes use the top view & the input angle = output angle rule.

To be ”perfect” the planes should be perpendicular to the bounced line of view from the camera.

As the planes will cast shadows from the sun, take this in consideration when placing them in your scene.

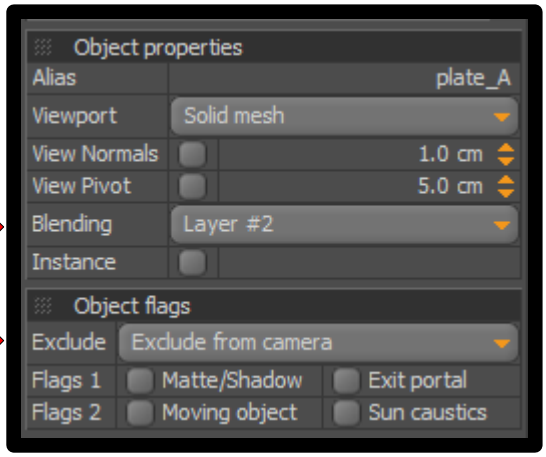


Object set-up

Two things to be done with the planes

1: Assign a blending layer that is exclusive for the plane, e.g. not occupied by another emitter.

2: Exclude from camera



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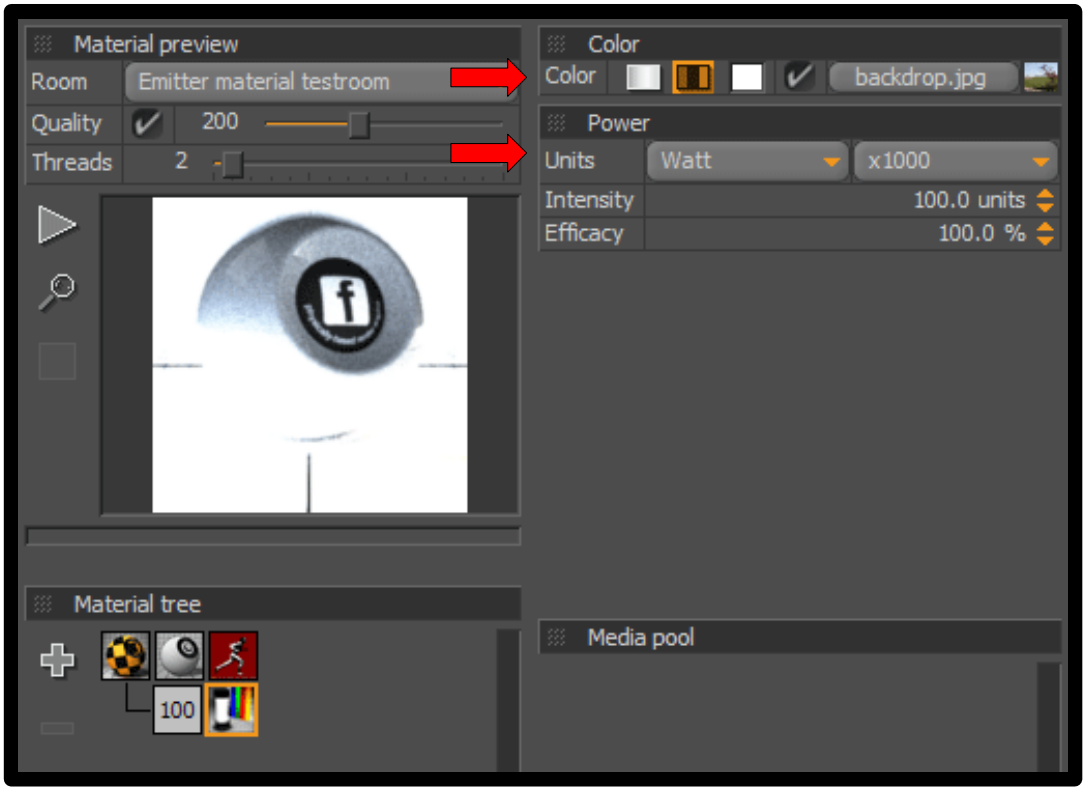
Material set-up

Make a new emitter material

Pick the image to be in the Color Slot.

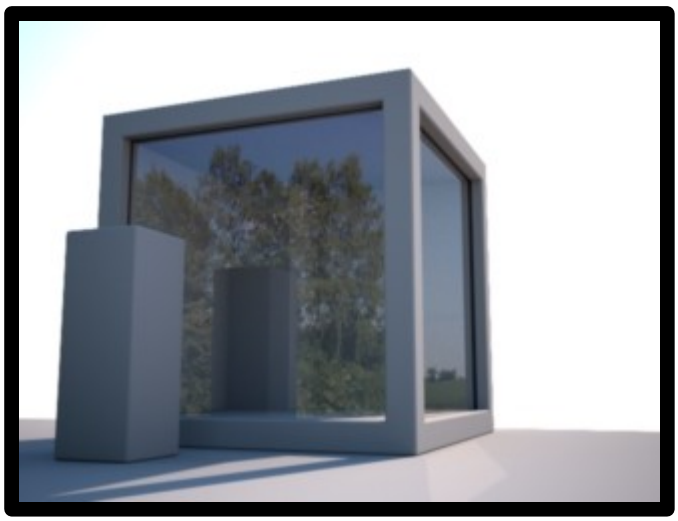
Since we most likely will be dealing with a low dynamic range image in the Color Slot, it is necessary to boost the exposure to get some visual feedback in a high dynamic range outdoor scene. The Emitter material testroom burns out for this reason as seen below, but do not worry. No animals where fried in this tutorial.



Rendering

Now it is try & error prime time with some low res previews to get as close to how you want the final result to be. Adjust the reflections with the intensity of your emitter material on the planes & give the bitmap controls a spin for further control.

Here is the default output with all layers



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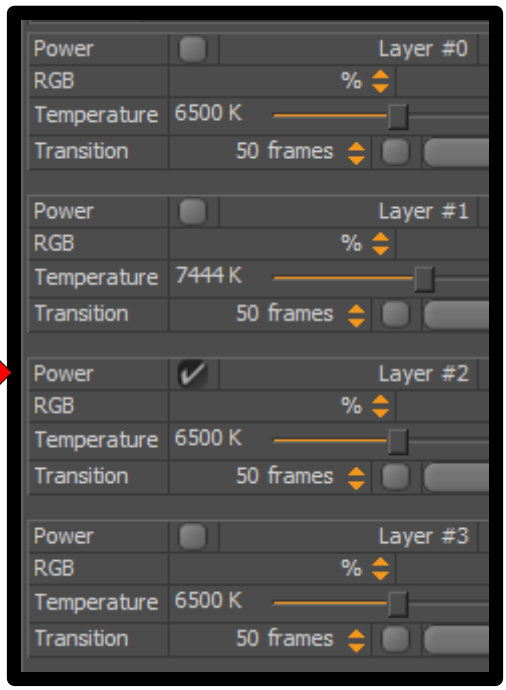
Reflection Pass

Extracting the layers

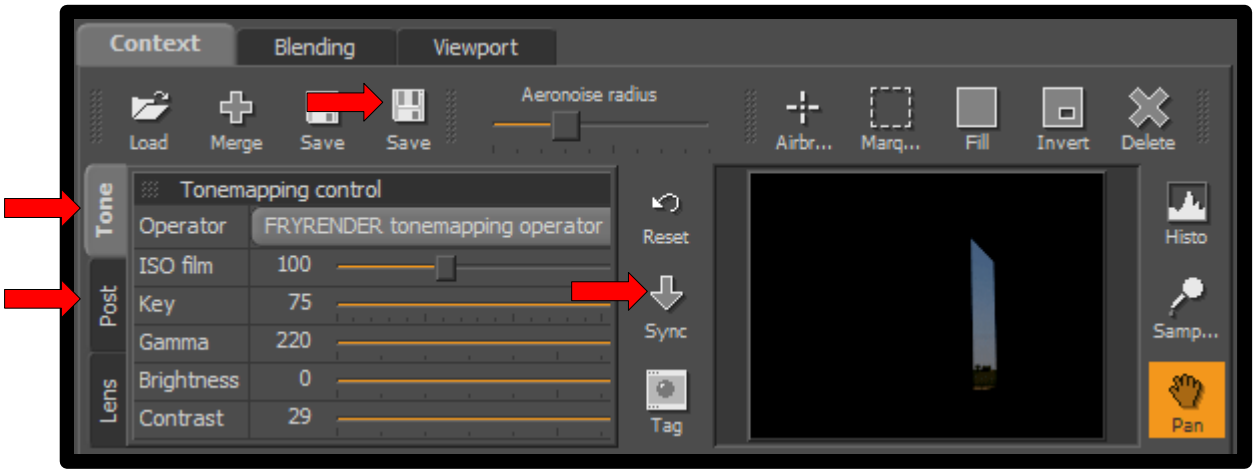
Go to the blending tab & enable the blending layers individually.



Fine tuning

Back in the context tab you will have access to fry´s tone & post controls for tuning your layer in 32 bit. When things look as they should Sync & Save.

Every step at this stage is non destructive. You can always go back to the .dsi and change settings.



Output example

<u>Reflection passes</u> (blending layers)

Sky & Sun blending layers

Composed outputs from the same .dsi