

# Strata 3D - Legacy Versions

## Soft Shadows Fast - 2002-04-10

**Question:** Is there a way, like in the project window, to hide an object but to still have its shadow?

**Answer:** Unfortunately, there's no easy way to do this and get accurate shadows. Even with Shadow Catcher - your object will obscure it's own shadows.

If you want fast soft shadows that you can combine with a rendered scene to give you some great effects - you can do the following...

Make your entire scene (except cameras and lights) into a shape object. Render the scene with raytracing as normal, no shadows on anything. Just full color, full resolution. You can brighten all of the lights in your scene if you want to - since in the following paragraph I'll explain how to create a shadow scene pretty easily - which will be multiplied with this rendering (either in video or in still, photoshop).

Then, make a texture that's 100% diffuse, 100% ambient, white. No reflection, no specular, nothing else. Apply that texture to your scene and render it with raydiosity with the the following settings:

### Raydiosity:

Texture Detail: Coarse (only grayscale - no textures)

Oversampling: None (not necessary for a multiply rendering, normally)

### Expert Settings:

Collected Light Amplifier - 1.0

Maximum Propagation Samples - 0

Maximum Diffuse Lighting Samples - 0

Maximum Light/Shadow Samples - 128 (your softness of the shadow)

Note on this one - 128 will take half as long to render as setting this to 255. So it's a direct correlation to your render time.

ONLY set this number to what is necessary.

Cached Sample Front Threshold - 100

Cached Sample Back Threshold - 100

Cached Sample Angular Derivation - 90

Minimum Cache Hits - 255

Maximum Cache Hits - 255

### Raytracing Esoterica (through the raydiosity dialogs above)

Maximum Reflectivity Recursion - 0

Maximum Transparency Recursion - 0

Maximum Visible Light Samples - 1

Visible Light Threshold - 8

Maximum Tracing Block Size - 8

Maximum Octree Height - 9

Block/volume subdivision threshold - 20

**NOTE:** Set the following to get NEAR Raytracing speeds (I'm talking about almost the same rendering time here, WITH soft shadows!!! - but it could lead to artifacts in your scene)

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Maximum Tracing Block Size - 12

Maximum Octree Height - 20

Block/volume subdivision threshold - 40

Hopefully this will help you along. Remember, think smart when using these settings. If you have reflective or transparent objects in your scene - set the required numbers to the MINIMUM that will get you by. For example, a transparent refractive sphere would require a Maximum Transparency Recursion of 2. Only 2 surfaces would be passed. If you had two of these in a row, you'd set this to 4. For reflective objects with a shadow rendering, this shouldn't be necessary - keep it at 0.

I guess this information should be good for anyone trying to get soft shadows at near raytracing speeds. In my tests - the settings here resulted in about a 1 second increase over rendering time of simple renderings from Raytracing Good. My test scene is a cube, square, pyramid, cone and cylinder on a ground plane with one light.

Your mileage may vary, but this is a good start to getting some sweet rendering speeds for soft shadows.

Unique solution ID: #1059

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Last update: 2010-01-08 17:13