

Flamingo®

Jewelry Rendering Technique

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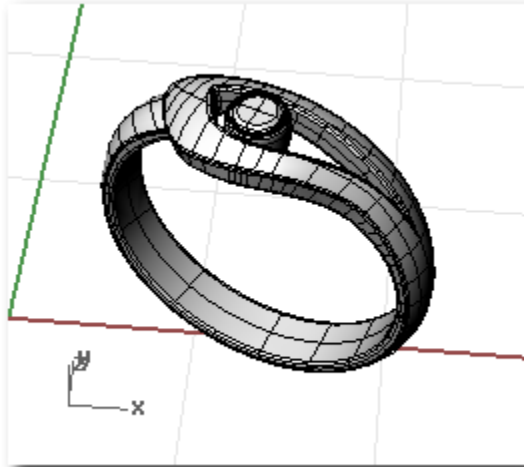
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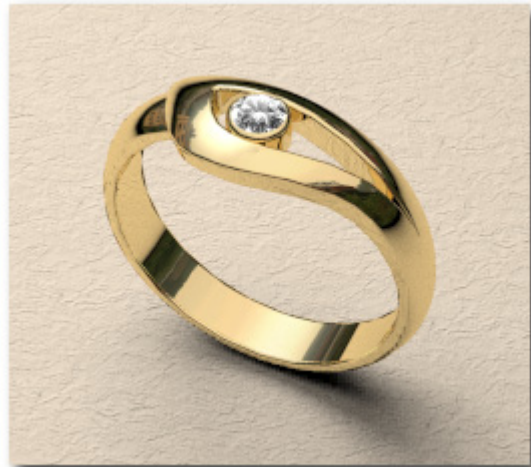
Gemstone Ring

This example model demonstrates a rendering technique for jewelry. The example shows how to apply materials and lighting and how to set up the environment to render the ring model.

Open the model that comes with this example (Ring_MO.3dm) to examine the settings.

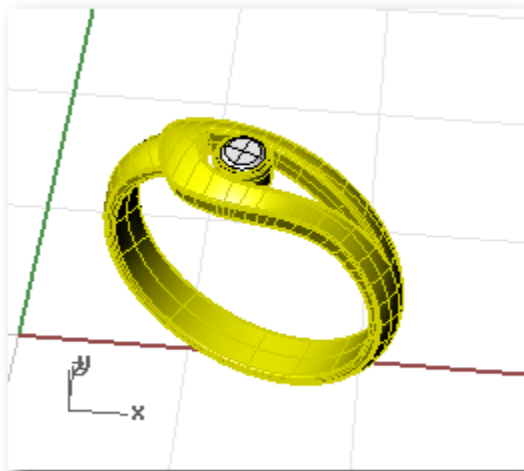


Model.



Rendered image.

Gold Material

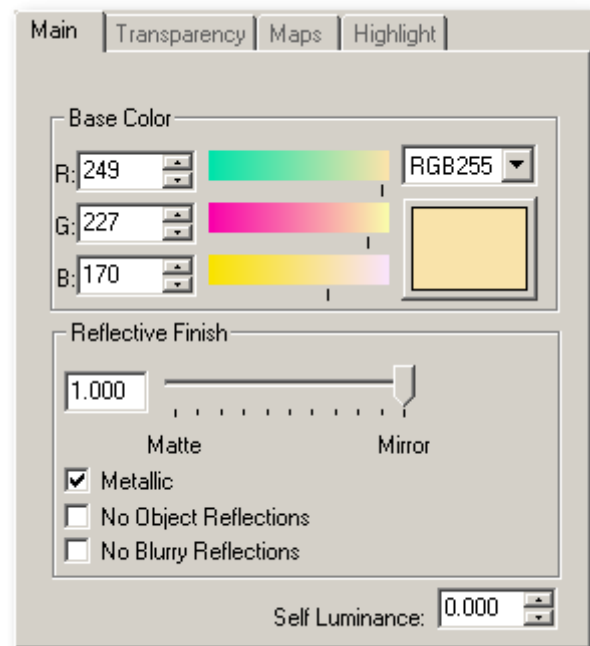


Material Editor: Main Page

Base Color: Red=249, Green=227, Blue=170

Reflective Finish= 1.000 (Mirror)

Metallic=Checked



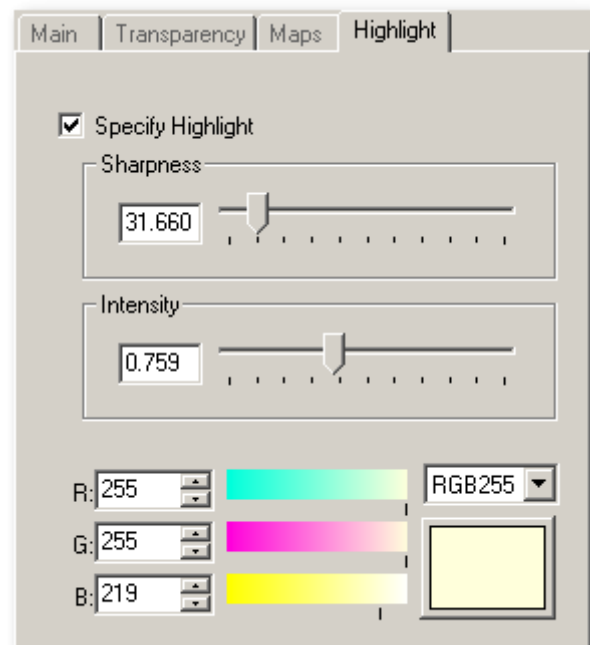
Material Editor: Highlight Page

Specify Highlight=Checked

Sharpness=31.660

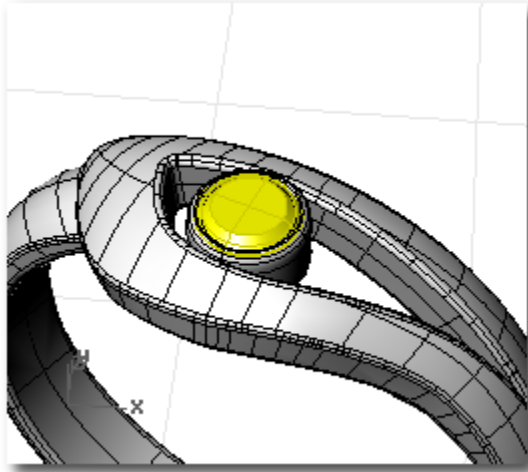
Intensity=0.759

Color (Light yellow): Red=255, Green=255, Blue=219



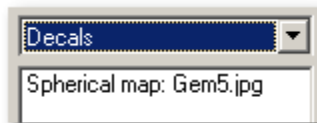
Gemstone Material

The gemstone material is not significant because all the material properties will be assigned by the decal mapping.

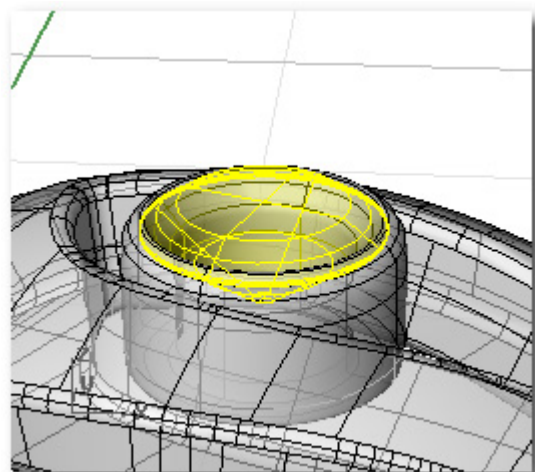


Gemstone Decal Mapping

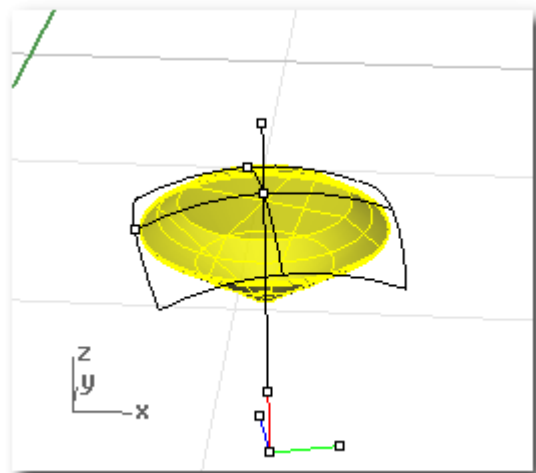
The gemstone appearance is achieved with a decal.



The decal is placed using **Spherical** mapping.

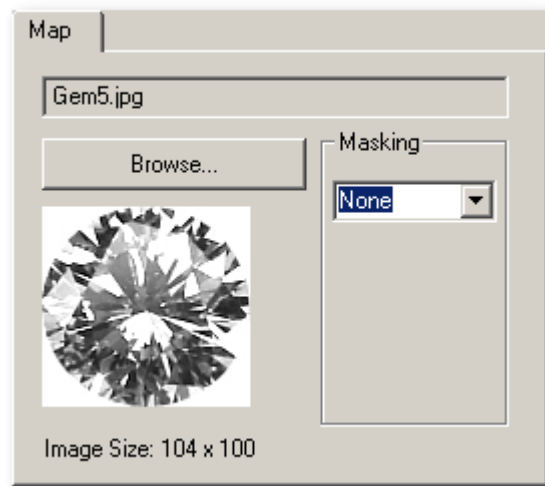


Decal mapping placement



Edit Decal: Map Page

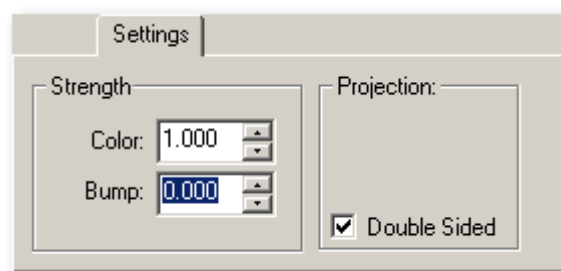
Decal bitmap=Gem5.jpg



Edit Decal: Settings Page

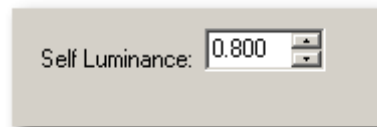
Strength Color=1.0

This setting will not let the decal map color to blend with the base color.

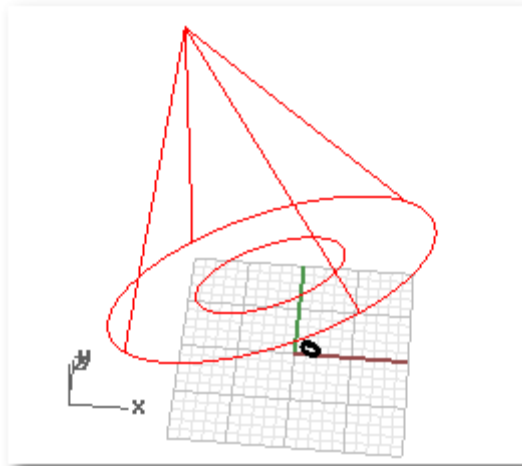


Edit Decal: Finish Page

Self-Luminance=0.8



Spotlight Properties



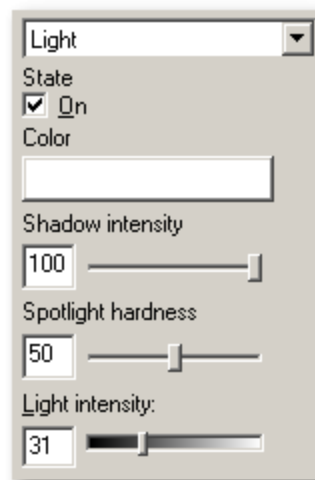
State=On

Color=White

Shadow intensity=100

Spotlight hardness=50

Light intensity=31



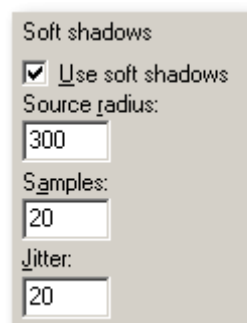
The **Use soft shadows** option is available if the **Soft shadows** option in the Document Properties dialog box is checked.

Use soft shadows=Checked

Source radius=300

Samples=20

Jitter=20



Flamingo Document Properties

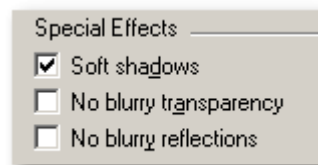
Antialiasing

Antialiasing=High 16X (slowest)



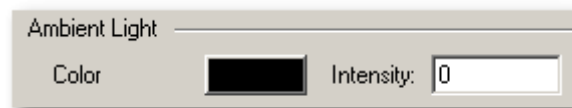
Special Effects

Soft shadows=Checked



Ambient Light

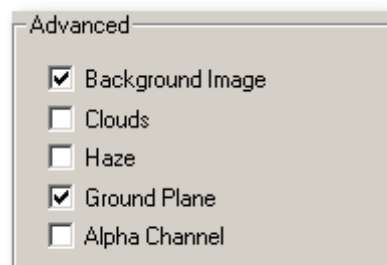
Intensity=0



Environment Properties

Background Image

Ground Plane

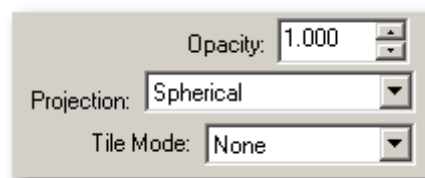


Environment: Background Image Page

Background image=Background.jpg

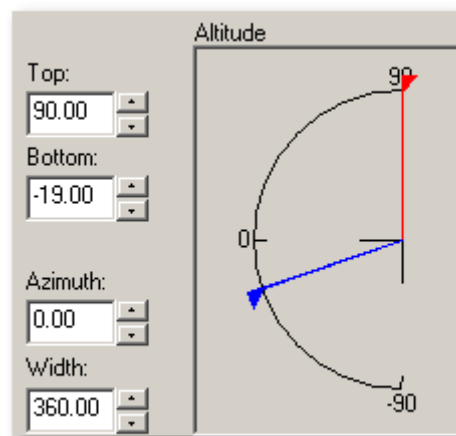


Projection=Spherical



Top Altitude= 90

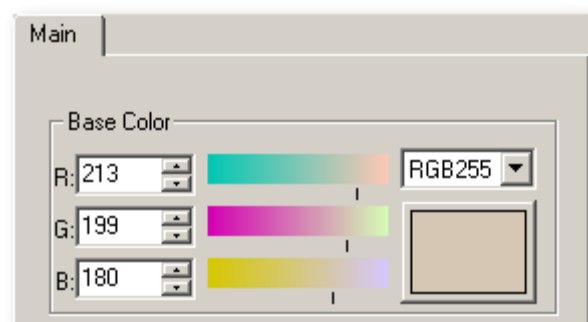
Bottom Altitude= -19

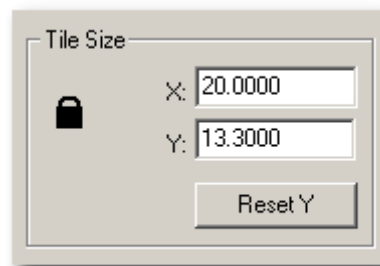


Environment: Ground Plane Material

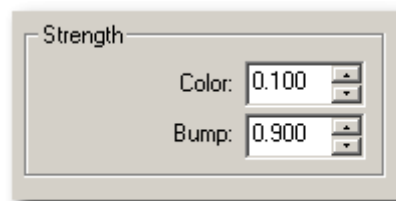
Material Editor: Main Page

Base Color (Beige, solid color):
Red=213, **Green**=199, **Blue**=180



Material Editor: Map Page**Map image**=STCE16.jpg**Image Mapping: Main Page****Tile Size**=X: 20.0, Y: 13.3**Color**=0.1

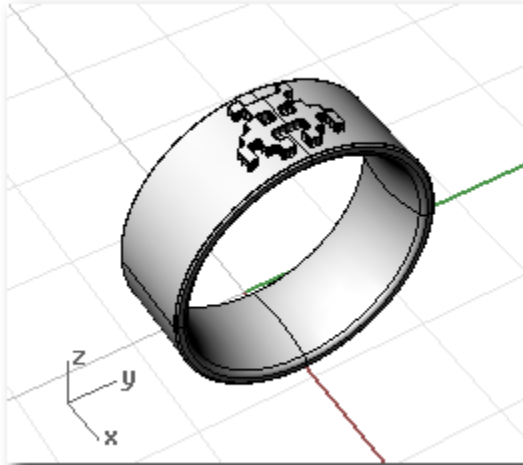
This setting blends the map color (gray) with the base color (beige).

Bump map=0.9 to create relief effect.

Alien Ring

This example model demonstrates a rendering technique for jewelry. The example shows how to apply materials and lighting and how to set up the environment to render the ring model.

Open the model that comes with this example (SpaceInvaders.3dm) to examine the settings.

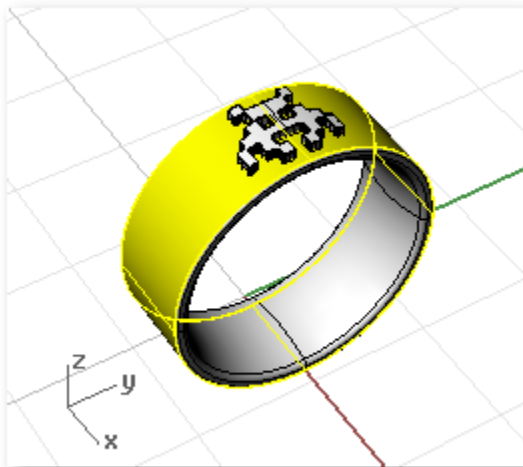


Model.



Rendered image.

Ring Exterior Material

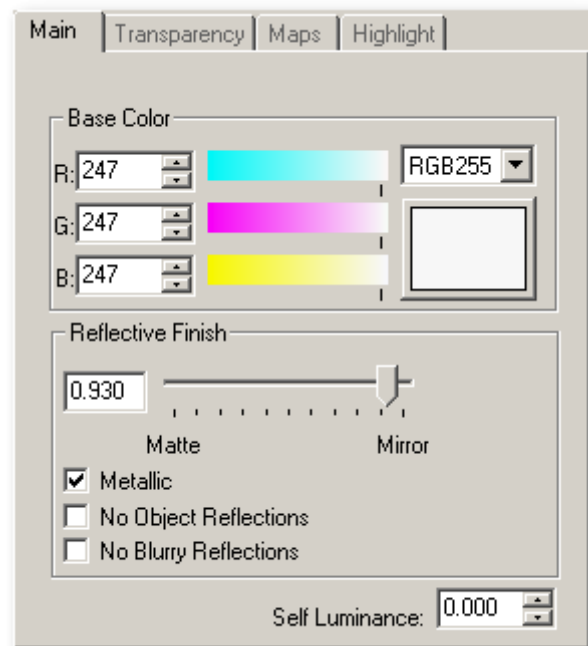


Material Editor: Main Page

Base color: Red=247, Green=247, Blue=247

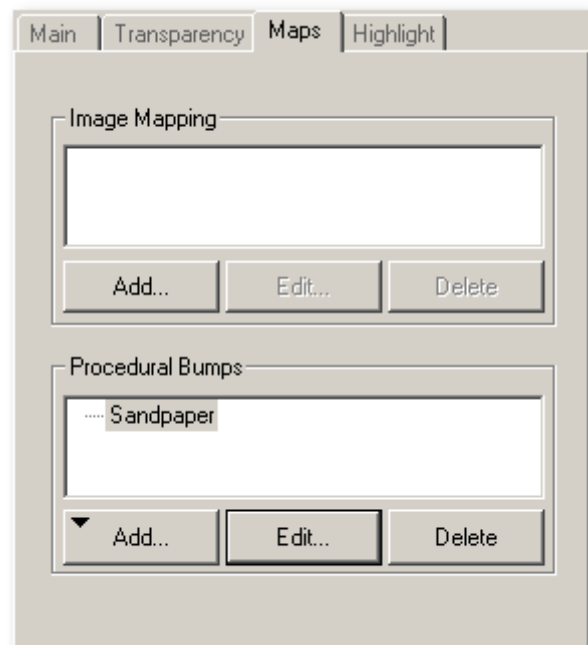
Reflective Finish=0.930

Metallic=Checked



Material Editor: Maps Page

Procedural Bumps=Sandpaper

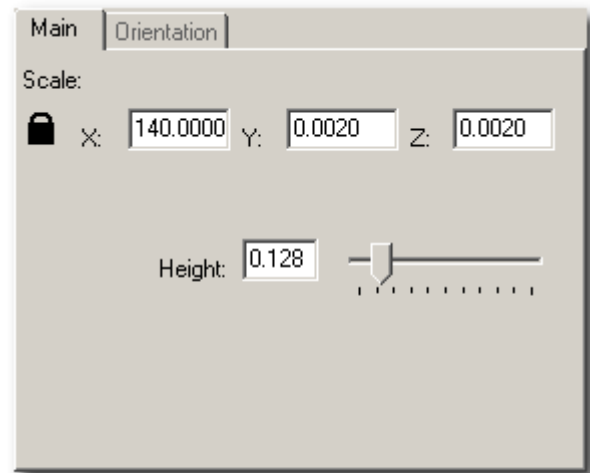


Sandpaper Properties

Edit Sandpaper Bumpmap: Main Page

Scale: X=140, Y=0.0020, Z=0.0020

Height=0.128

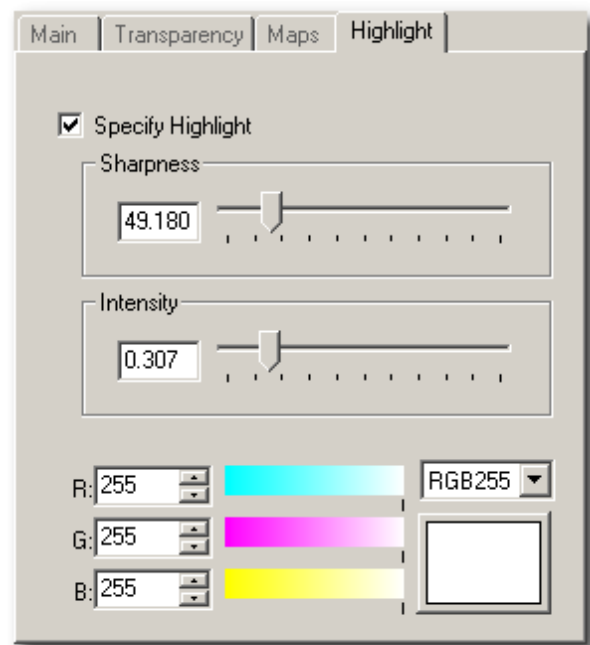


Material Editor: Highlight Page

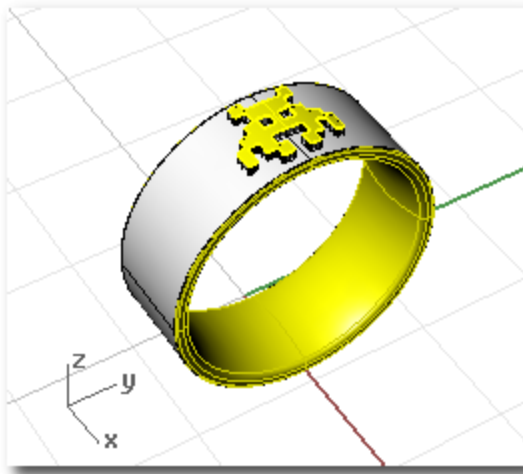
Specify Highlight=checked

Sharpness=49.180

Intensity=0.307



Ring Interior and Alien Face Material

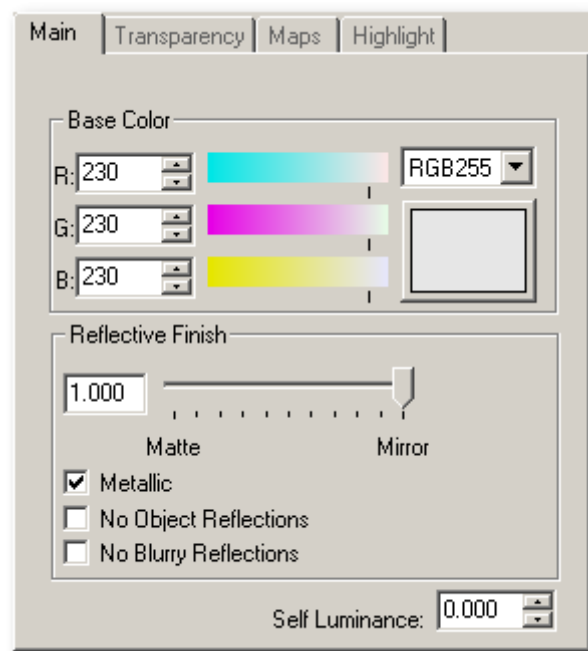


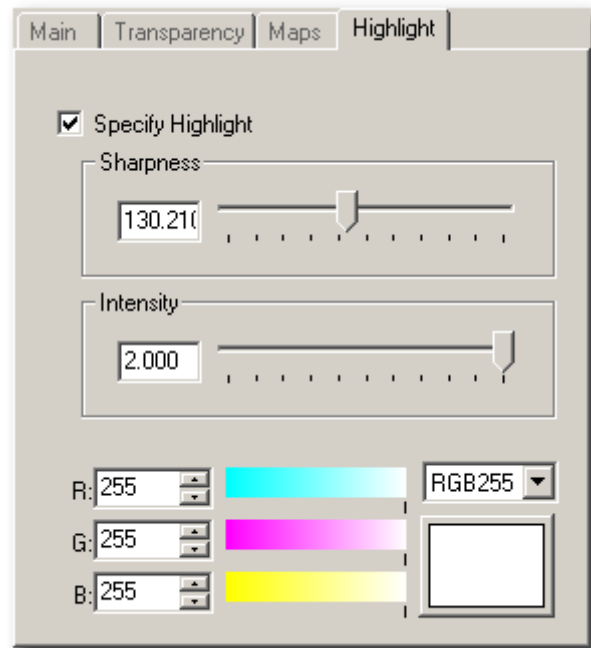
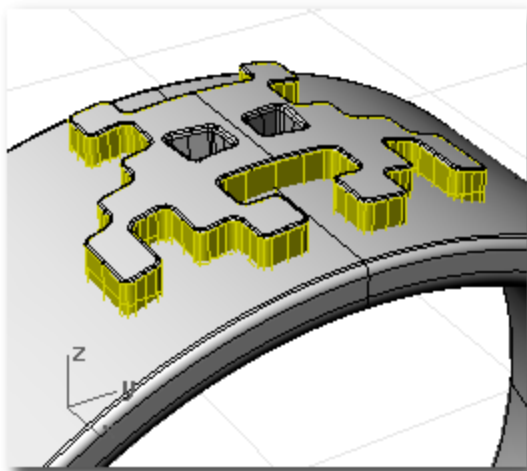
Material Editor: Main Page

Base Color: Red=230, Green=230, Blue=230

Reflective finish=1.0

Metallic=checked



Material Editor: Highlight Page**Specify Highlight**=checked**Sharpness**=130.210**Intensity**=2.0**Alien Face Walls Material**

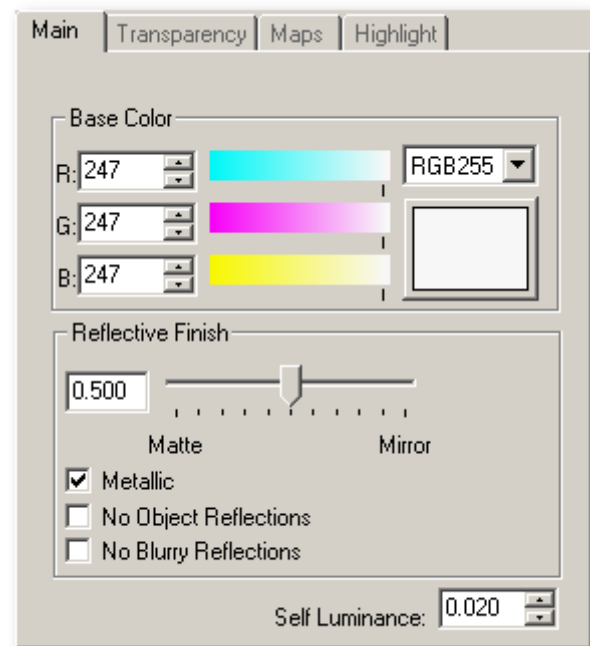
Material Editor: Main Page

Base Color: Red=247, Green=247, Blue=247

Reflective Finish=0.5

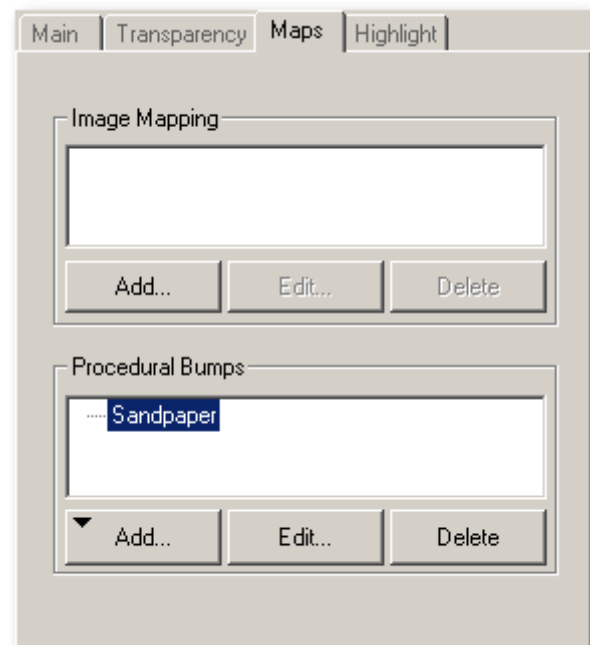
Metallic=Checked

Self Luminance=0.020



Material Editor: Map Page

Procedural Bumps=Sandpaper

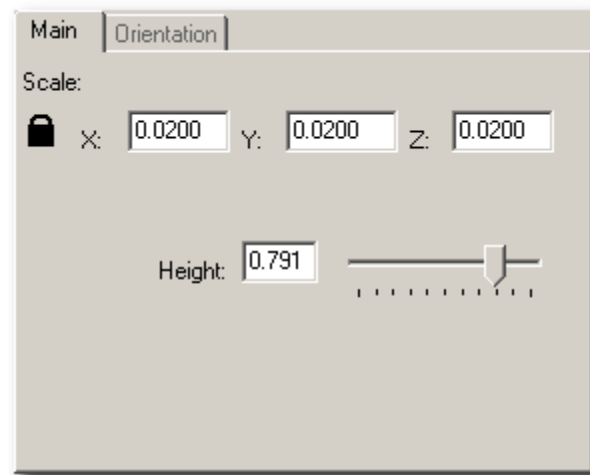


Sandpaper Properties

Edit Sandpaper Bumpmap: Main Page

Scale: X=0.020, Y=0.020, Z=0.020

Height=0.791

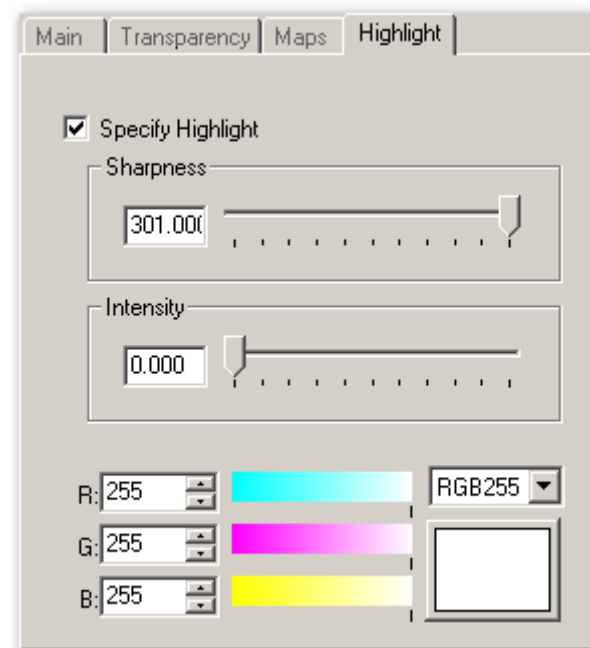


Material Editor: Highlight Page

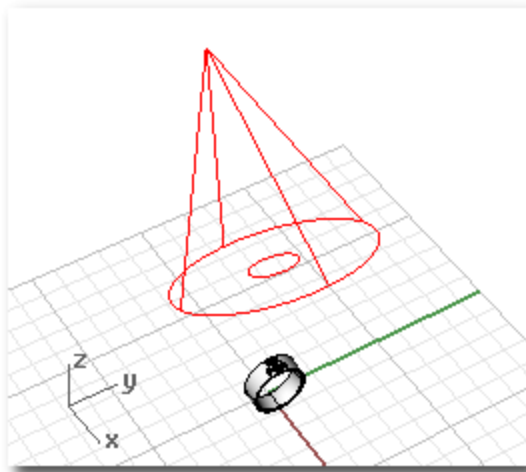
Specify Highlight=checked

Sharpness=301

Intensity=0



Spotlight Properties



The scene is lit with one spotlight.

State=On

Color=White

Shadow intensity=100

Spotlight hardness=26

Light intensity=30



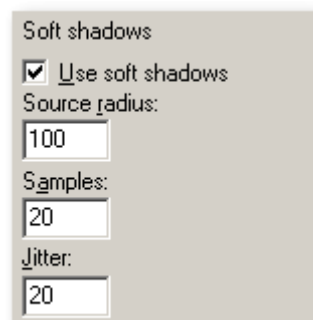
The **Use soft shadows** option is available if the **Soft shadows** option in the Document Properties dialog box is checked.

Use soft shadows=Checked

Source radius=100

Samples=20

Jitter=20



Flamingo Document Properties

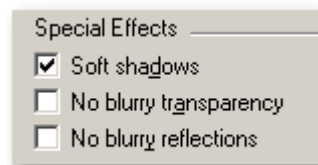
Antialiasing

Antialiasing=High 16X (slowest)



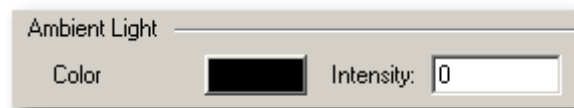
Special Effects

Soft shadows=Checked



Ambient Light

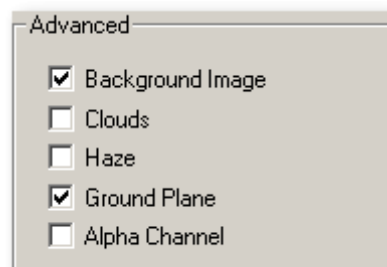
Intensity=0



Environment Properties

Background Image

Ground Plane



Environment: Background Image Page

Background image=Background.jpg



Projection=Spherical

Opacity: 1.000

Projection: Spherical

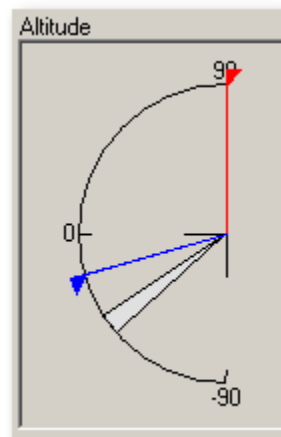
Tile Mode: None

Altitude Top= 90

Altitude Bottom= -16

Top: 90.00

Bottom: -16.00

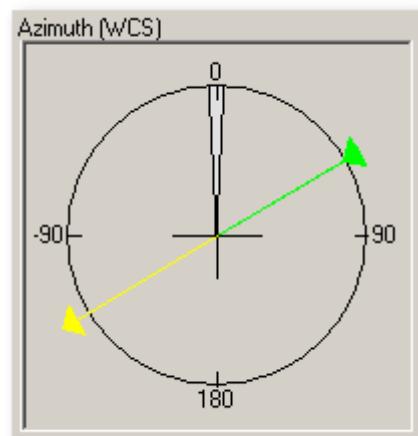


Azimuth=-121

Width=360

Azimuth: -121.00

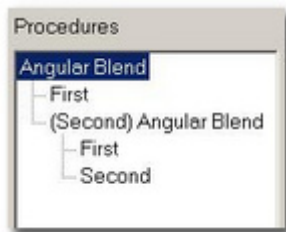
Width: 360.00



Ground Plane Material Properties

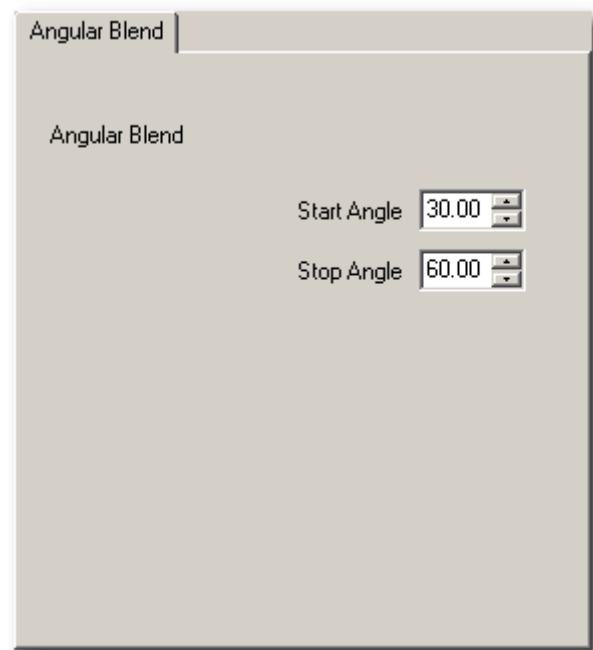
Angular blend material applied to second material inside the first angular blend.

Angular Blend



Start Angle=30°

Stop Angle=60°



First Material

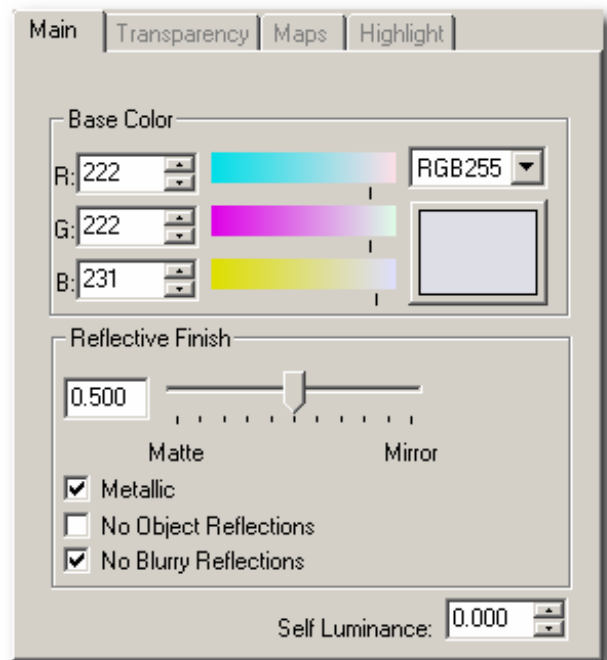
Material Editor: Main Page

Base Color: Red=222, Green=222, Blue=231

Reflective Finish=0.5

Metallic=checked

No Blurry Reflections=checked



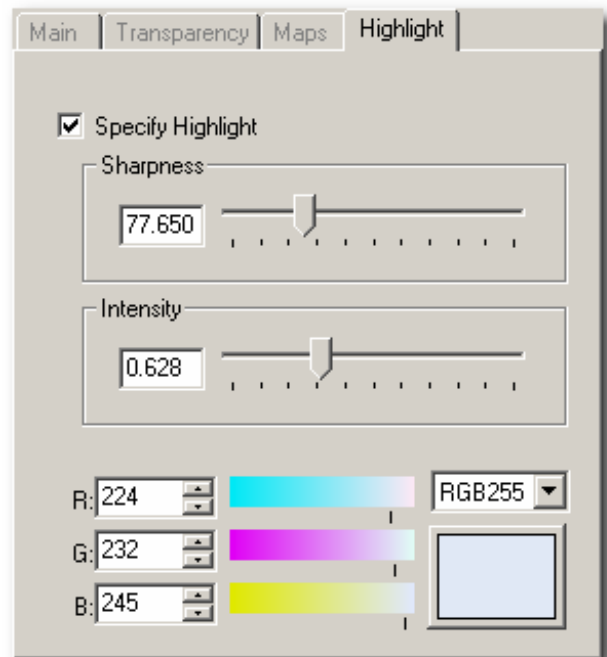
Material Editor: Highlight Page

Specify Highlight=checked

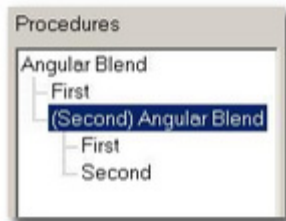
Sharpness=77.650

Intensity=0.628

Color: Red=224, Green=232, Blue=245

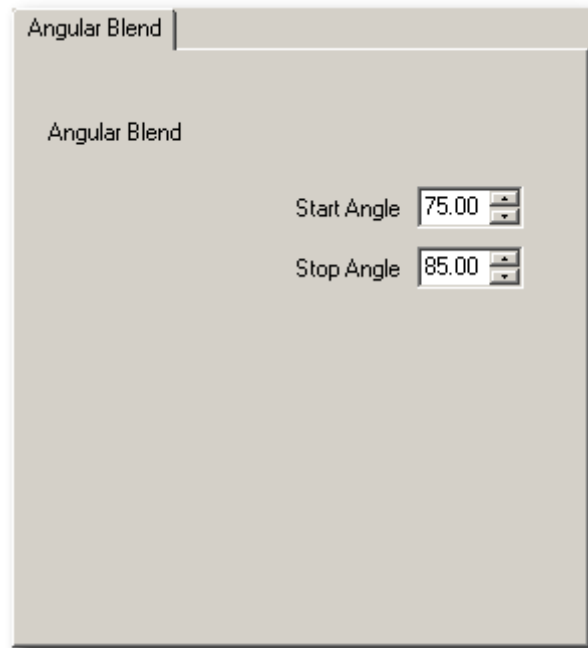


(Second) Angular Blend

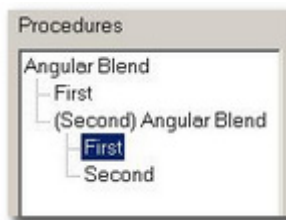


Start Angle=75°

Stop Angle=85°

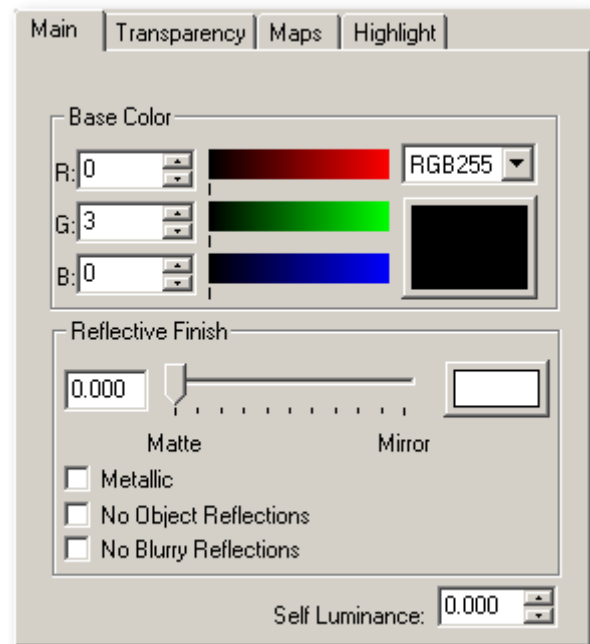


First Material



Material Editor: Main Page

Base Color: Red=0, Green=3, Blue=0

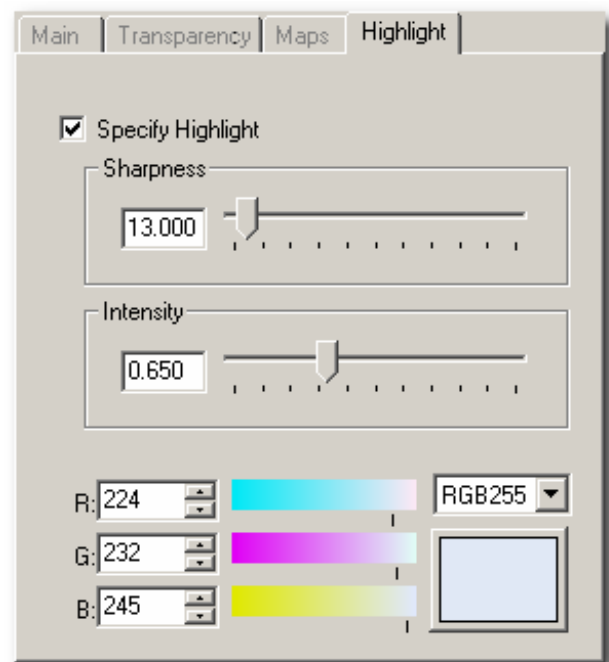
**Material Editor: Highlight Page**

Specify Highlight=checked

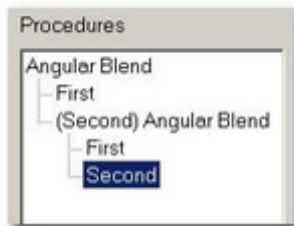
Sharpness=13

Intensity=0.650

Color=Red=224, Green=232, Blue=245



Second Material



Material Editor: Main Page

Base Color=White

Self Luminance=0.190

