

Self-paced
Video Tutorials
Series 1

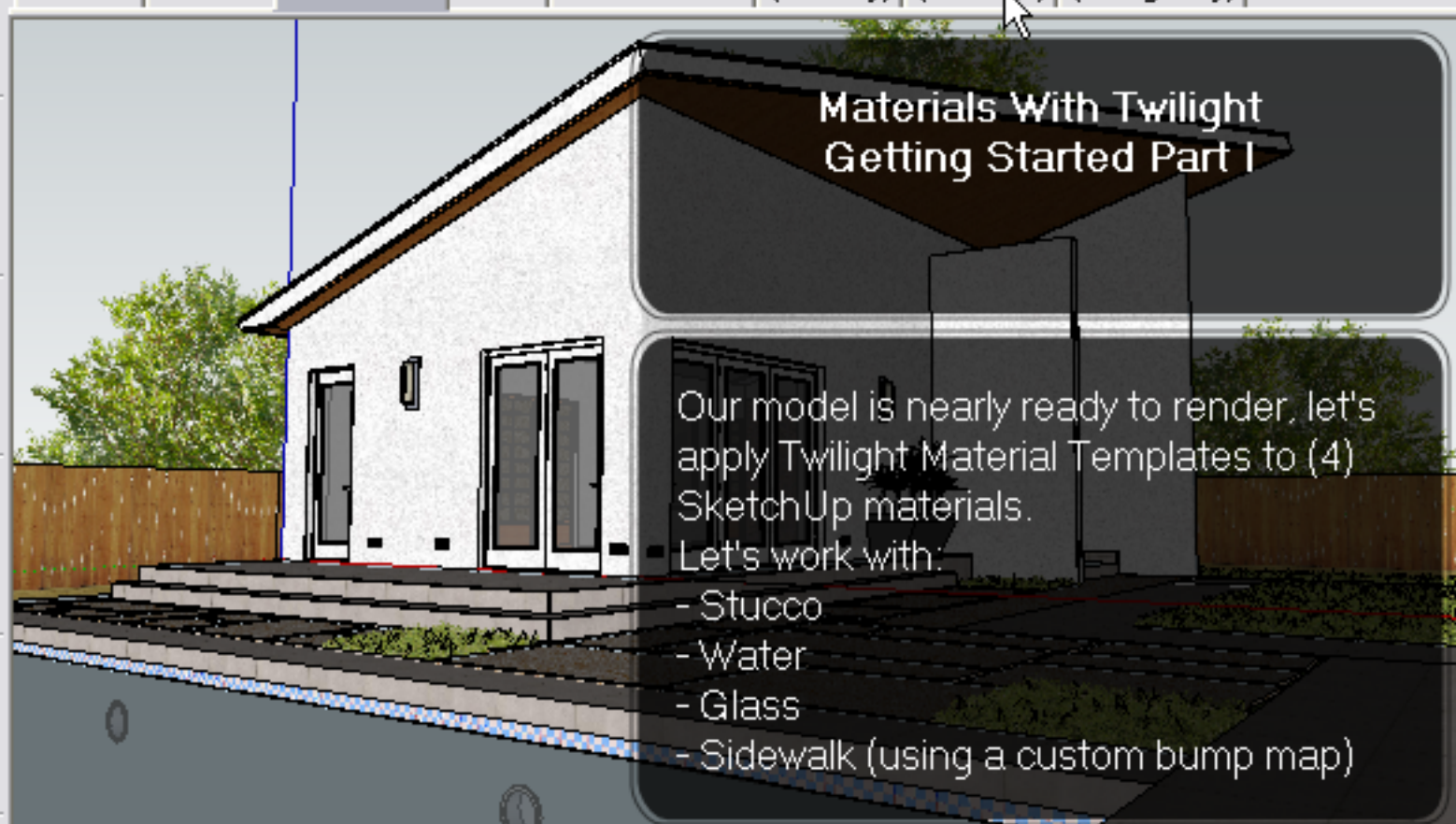
Twilight Render.

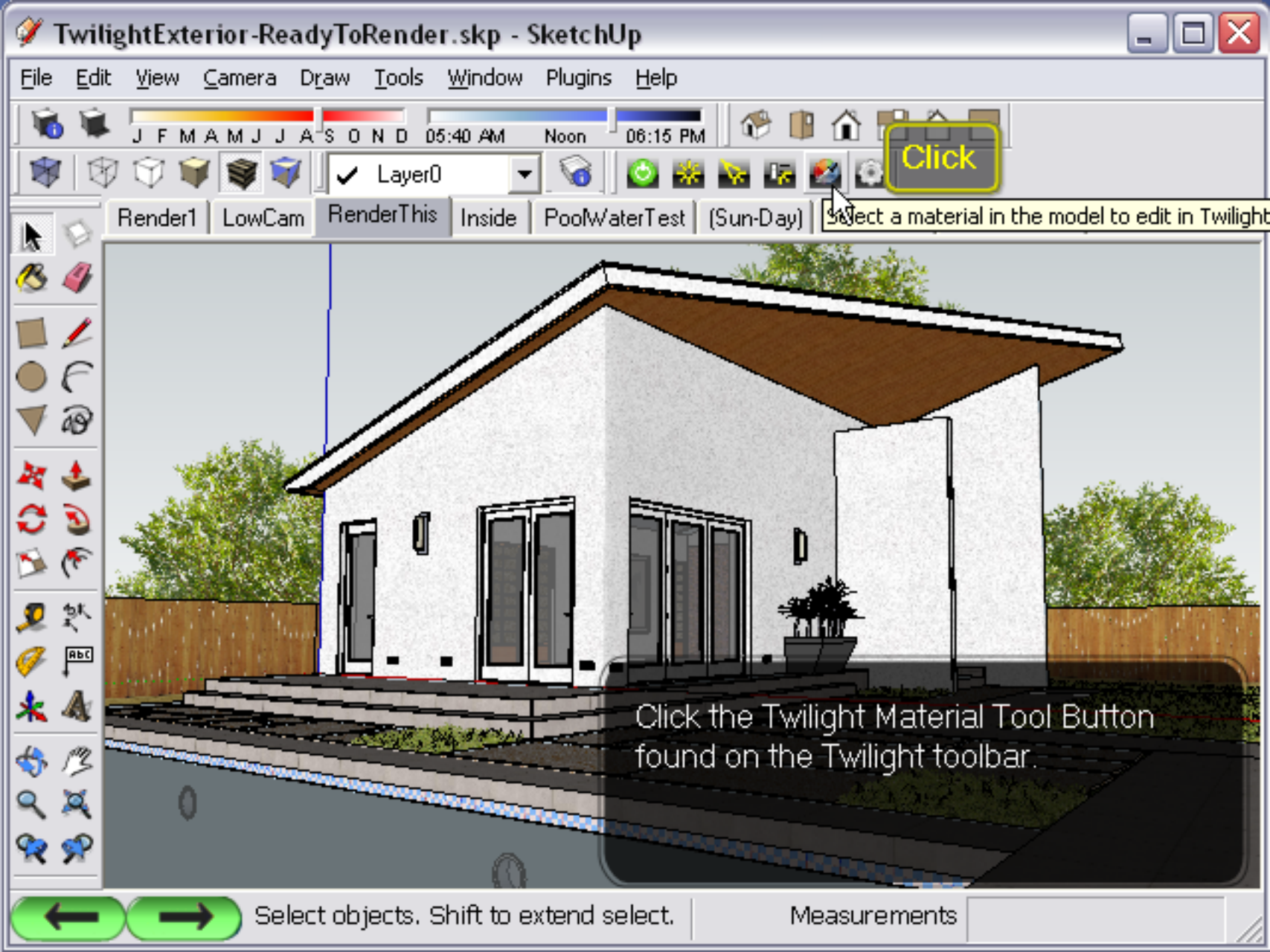
Materials With Twilight Getting Started Part I



Click arrow button to
continue to next slide.







Click

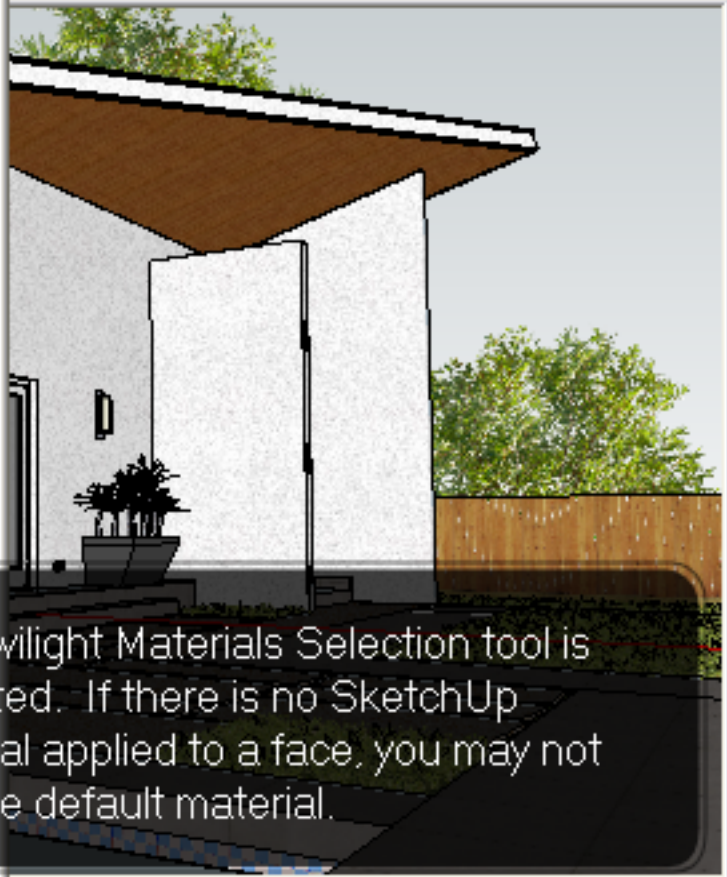
Select a material in the model to edit in Twilight

Click the Twilight Material Tool Button found on the Twilight toolbar.

Type:



(Sun-Day) | (Sun-High) | (TwiLightSky)
















The Twilight Materials Selection tool is activated. If there is no SketchUp material applied to a face, you may not edit the default material.

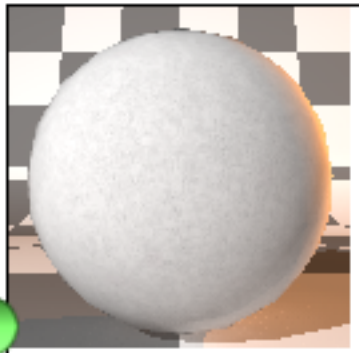




Length

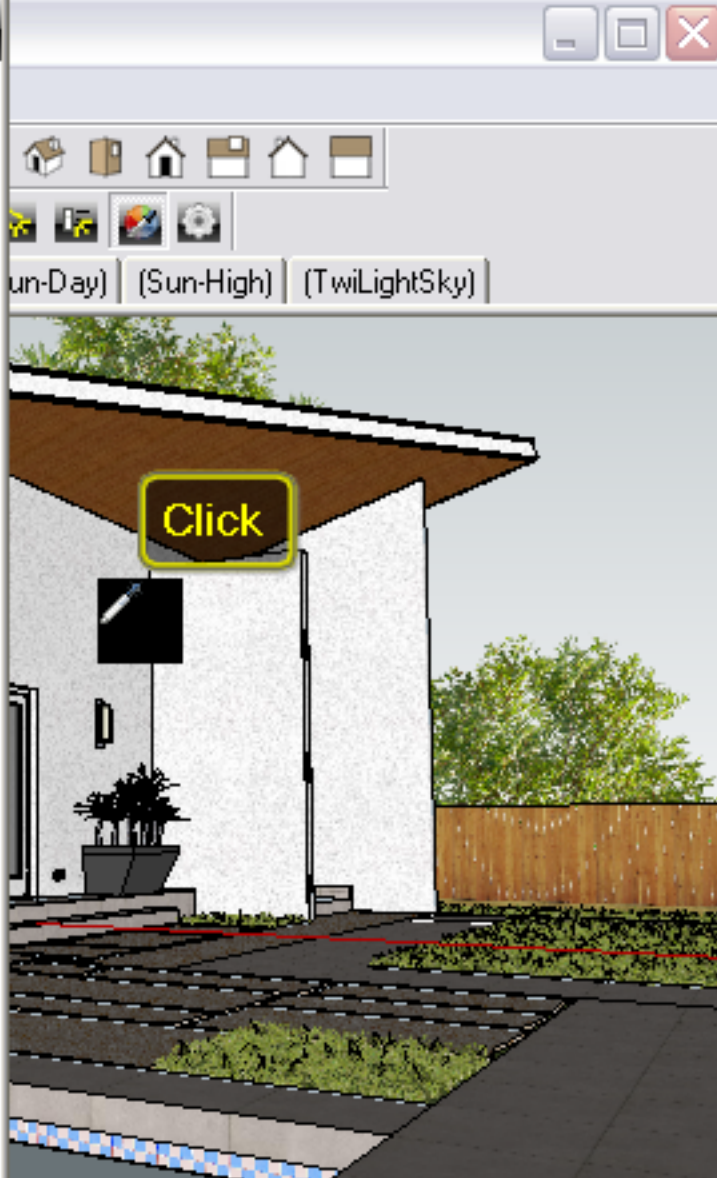
Edit Library 

	 Color	<input type="text" value="black"/>	
	 Texture	<input type="text" value="C:\Documents and S..."/>	<input type="button" value="Browse"/>
	 Reflection	<input type="text" value="white"/>	
	 Color	<input type="text"/>	<input type="button" value="Browse"/>
	 Bump	Size: <input type="text" value="1.000"/>	<input type="checkbox"/> Invert
	 No Texture	<input type="text"/>	<input type="button" value="Browse"/>

	 Alpha	<input type="text" value="100.000"/>
Index of Refraction:	<input type="text" value="1.100"/>	Hard Edge Angle: <input type="text" value="0"/>
Shininess:	<input type="text" value="10.000"/>	Edge Line: <input type="text" value="0.100"/>

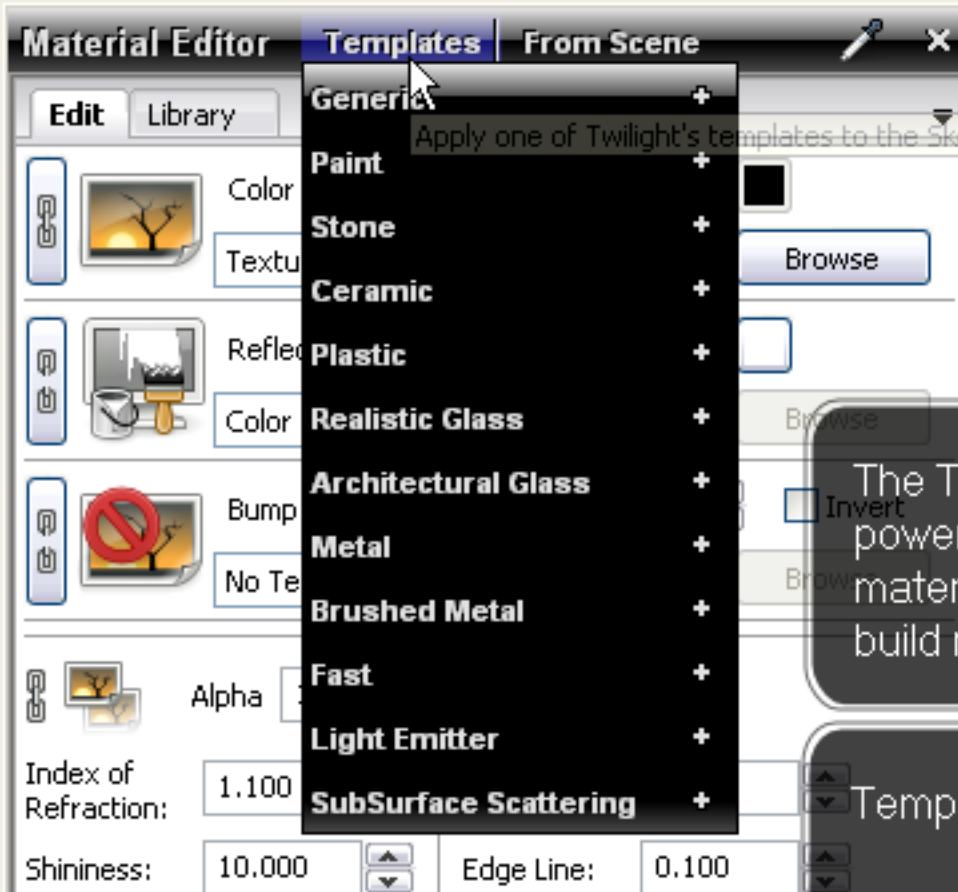




sun-Day) (Sun-High) (TwilightSky)

Measurements



Apply one of Twilight's templates to the SketchUp material

The Twilight Materials Templates are a powerful and fast way to make realistic materials without having to know how to build materials.

Templates Features:

- share seamlessly among all users
- physically accurate
- do not increase a model's file size
- eliminate the need for libraries
- may help eliminate missing textures

Measurements

Material Editor Templates From Scene

Edit Library

- Generic + Natural
- Paint + Rough
- Stone - Polished**
- Ceramic +
- Plastic +
- Realistic Glass +
- Architectural Glass +
- Metal +
- Brushed Metal +
- Fast +
- Light Emitter +
- SubSurface Scattering +

Color

Texture

Reflected

Color

Bump

No Texture

Alpha

Index of Refraction: 1.100

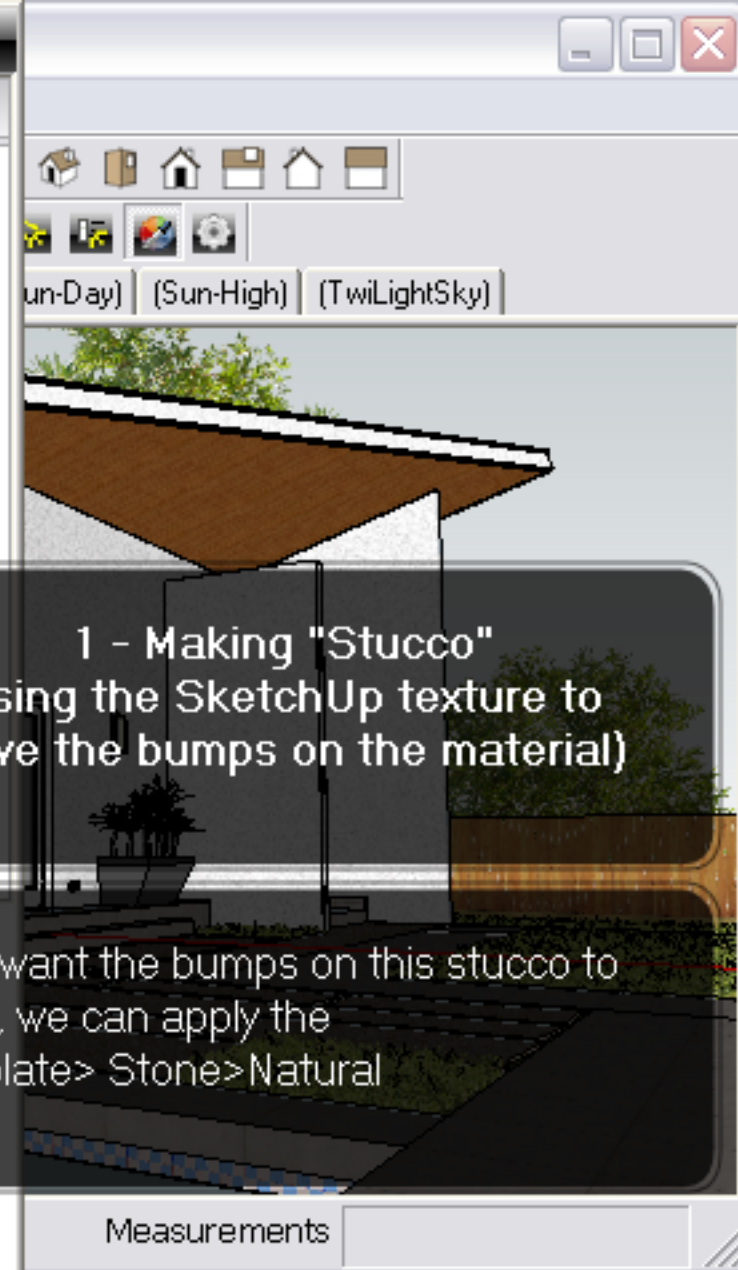
Shininess: 10.000 Edge Line: 0.100



Home Home Home Home Home

Tools

(Sun-Day) (Sun-High) (TwilightSky)





1 - Making "Stucco"
(using the SketchUp texture to drive the bumps on the material)


If we want the bumps on this stucco to show, we can apply the Template > Stone > Natural

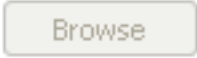
Measurements

Edit Library

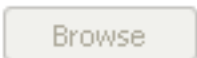
Color | black | 

Texture | C:\Documents and S... | 

Reflection | white | 

Color | 

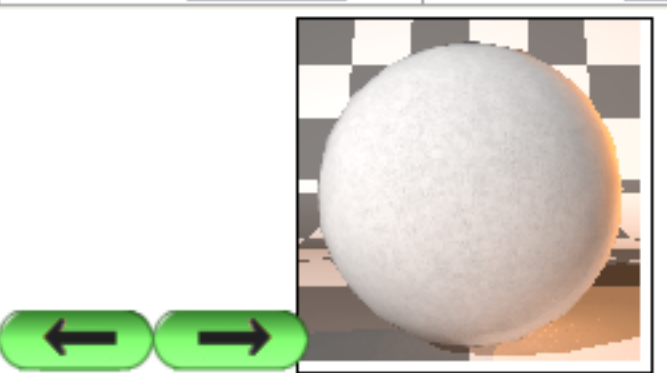
Bump | Size: 1.000 | Invert

No Texture | 

Alpha | 100.000

Index of Refraction: | 1.100 | **Hard Edge Angle:** | 0


Shininess: | 10.000 | **Edge Line:** | 0.100

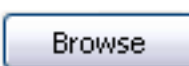


Then we link the Bump channel to the texture image from SketchUp.

Measurements

Edit Library

Color | black | 

Texture | C:\Documents and Settings\... | 

Reflection | white | 

Color | 

Bump | Size: 1.000 | Invert

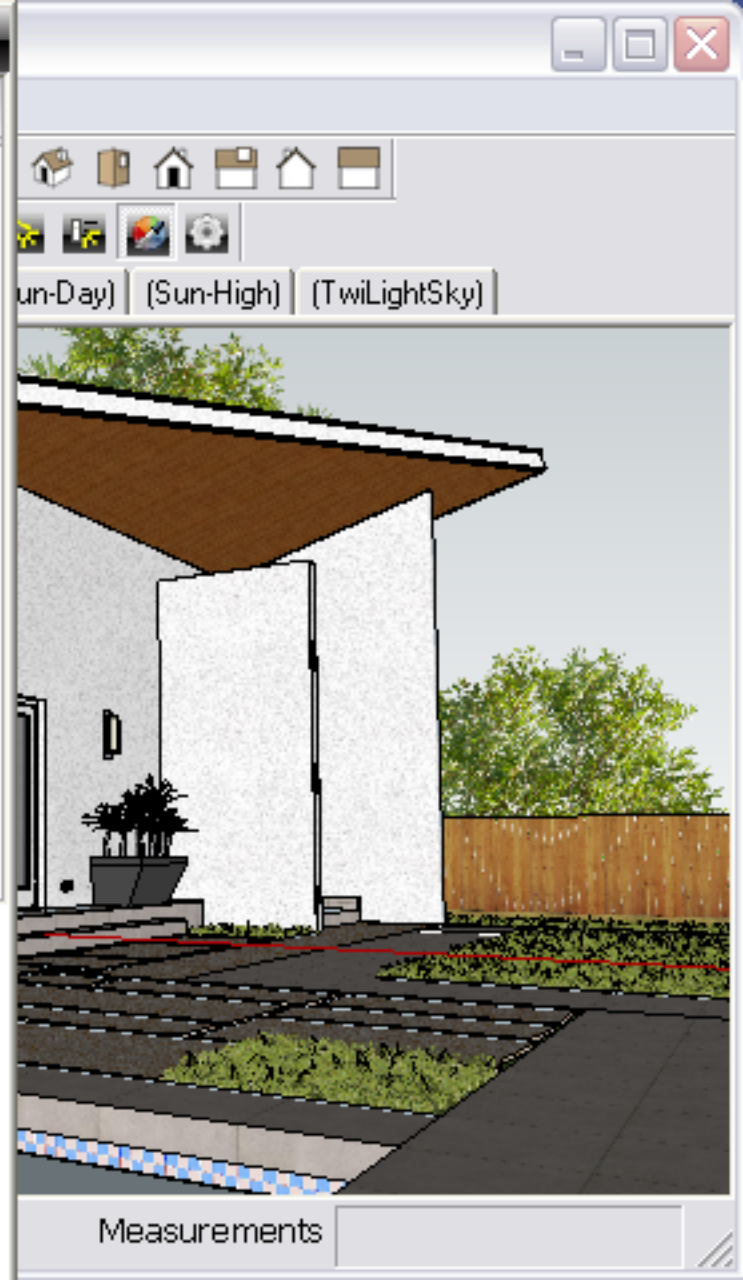
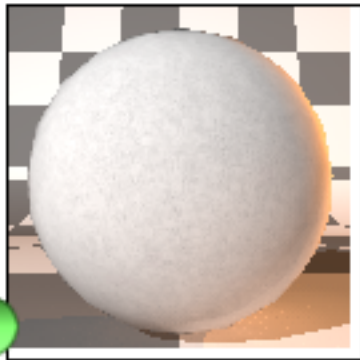
No Texture | 

Click



Alpha | 100.000


Index of Refraction: | 1.100 | **Hard Edge Angle:** | 0



Shininess: | 10.000 | **Edge Line:** | 0.100





Edit Library



 Color: 



 Texture:


 Reflection: 


 Color:


 Bump: Invert


 Texture:

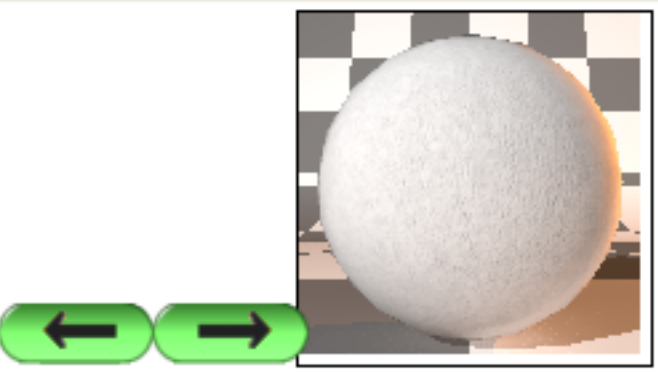

 Alpha:

Index of Refraction:

Hard Edge Angle:

Shininess:

Edge Line:



We can see the bumps appear on our preview shape, and adjust the bump strength or "size" as desired.

Edit | Library

Color
Texture: black
C:\Documents and Settings\... Browse

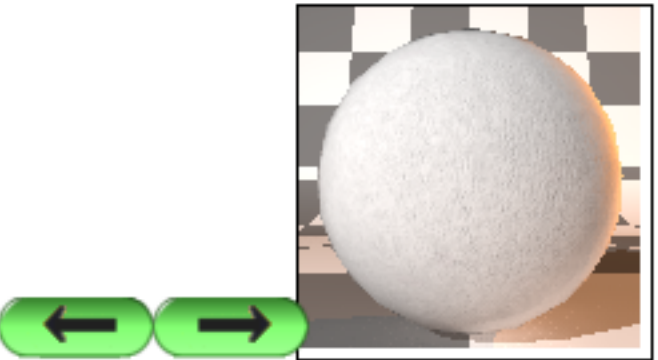
Reflection
Color: white
Browse

Bump
Size: .5 | Invert
Texture: C:\Documents and Settings\... Browse

Alpha: 100.000

Index of Refraction: 1.100 | Hard Edge Angle: 0

Shininess: 10.000 | Edge Line: 0.100



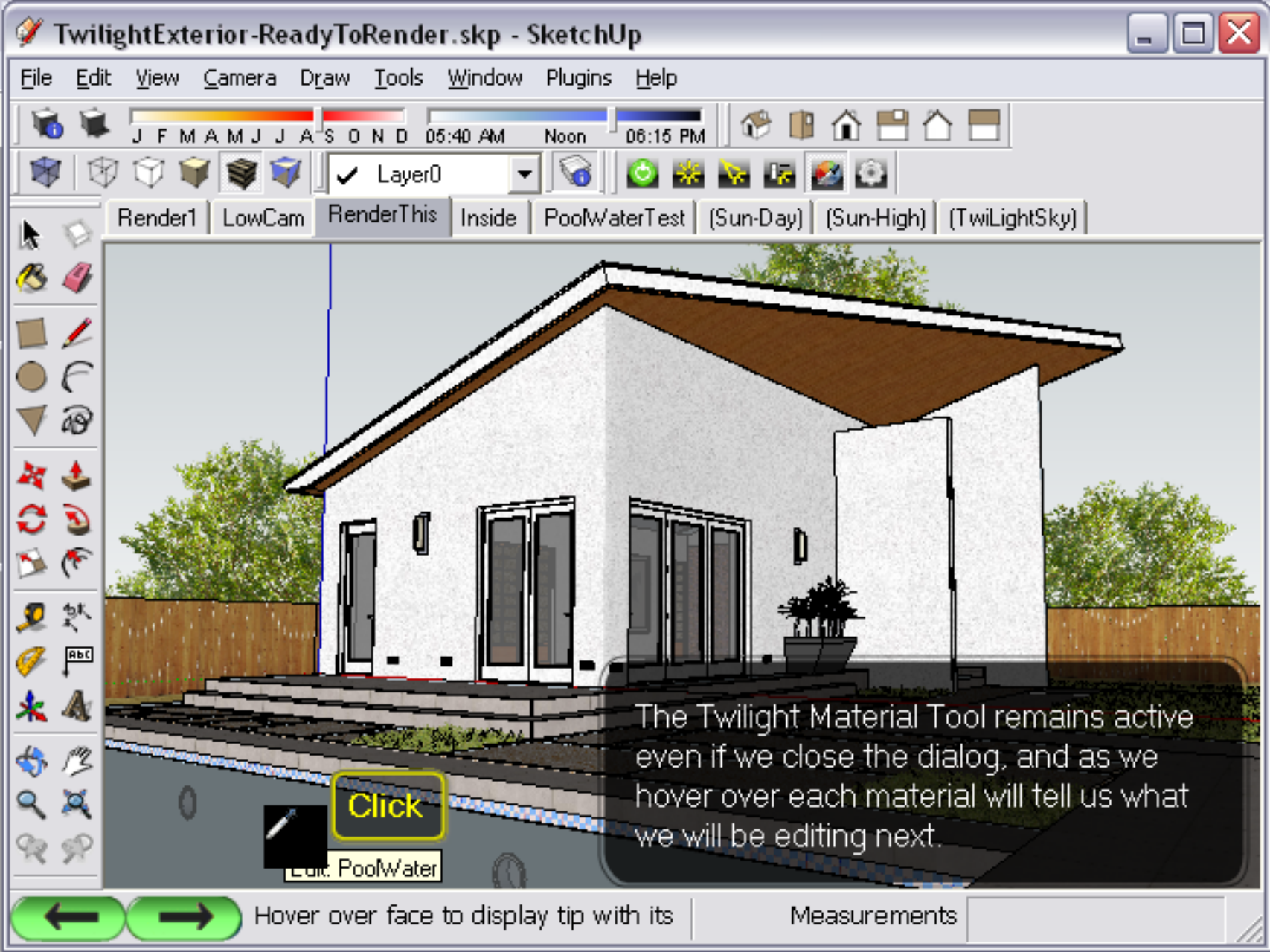
Click

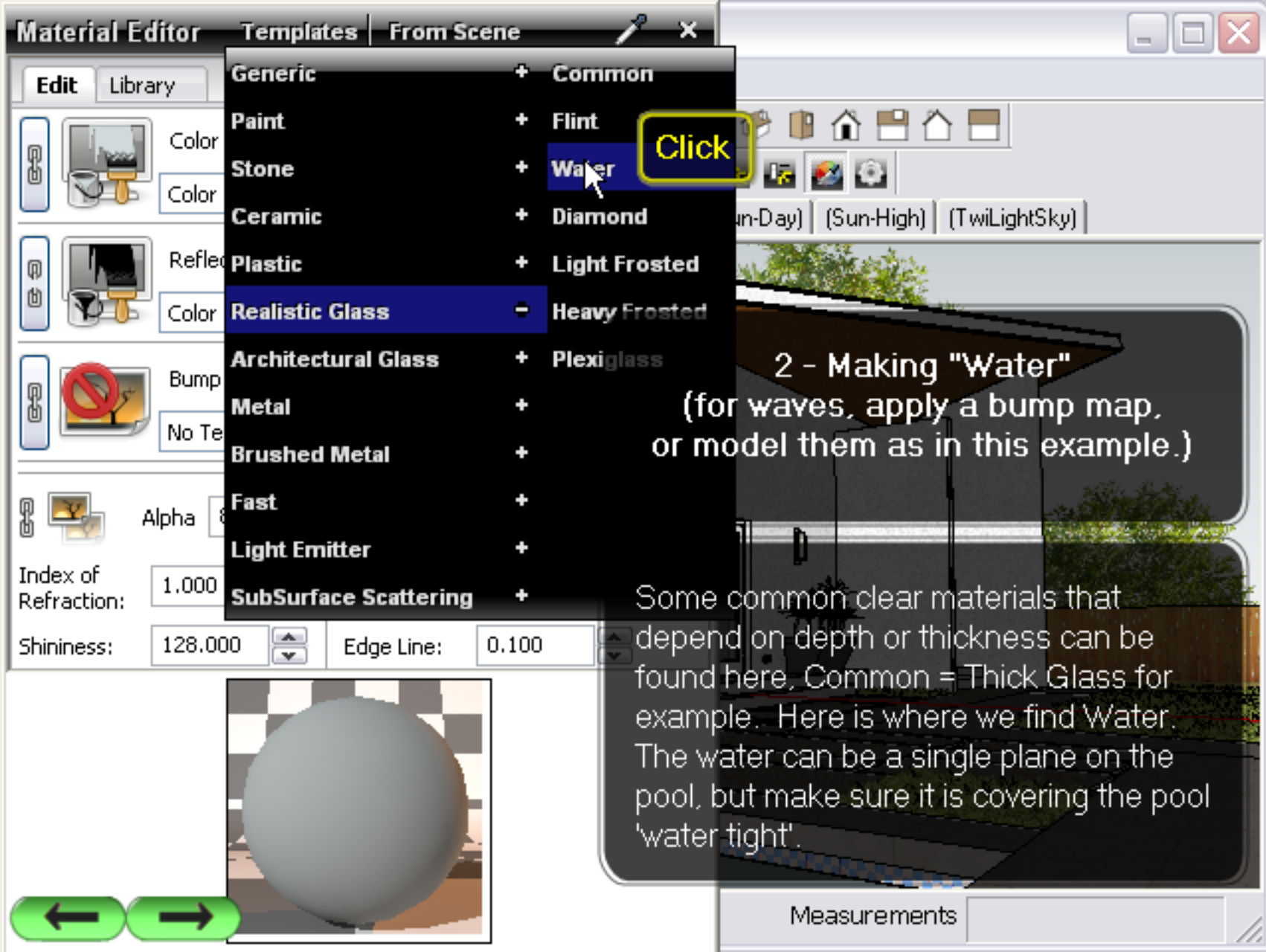
The window title bar contains standard minimize, maximize, and close buttons. Below it is a toolbar with icons for home, save, and other functions.


(Sun-Day) | (Sun-High) | (TwilightSky)




























Measurements

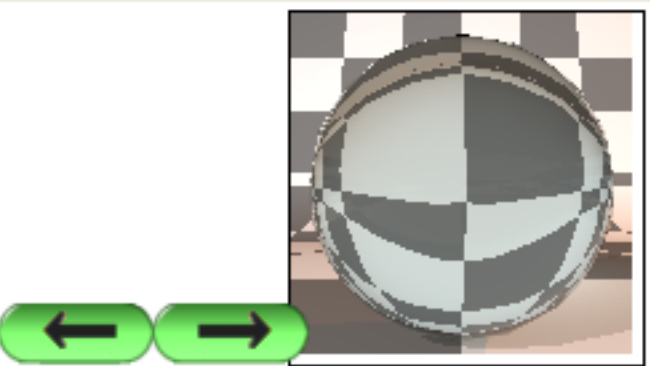




Edit Library 

		Color	rgb(208, 218, 219)	
		Color		<input type="button" value="Browse"/>
		Reflection	white	
		Color		<input type="button" value="Browse"/>
		Bump	Size: 0.100  	<input type="checkbox"/> Invert
		No Texture		<input type="button" value="Browse"/>

		Alpha	30.000  
Index of Refraction:	1.333  	Hard Edge Angle	0  
Shininess:	128.000  	Edge Line:	0.100  



Select the color to use for the Color channel



The color for the material has been brought in from the SketchUp material definition. Let's make the color white. The transparency (Alpha=30) has now been set automatically, and linked back to the SketchUp material definition, so it has changed in the view.

Edit Library

Color white

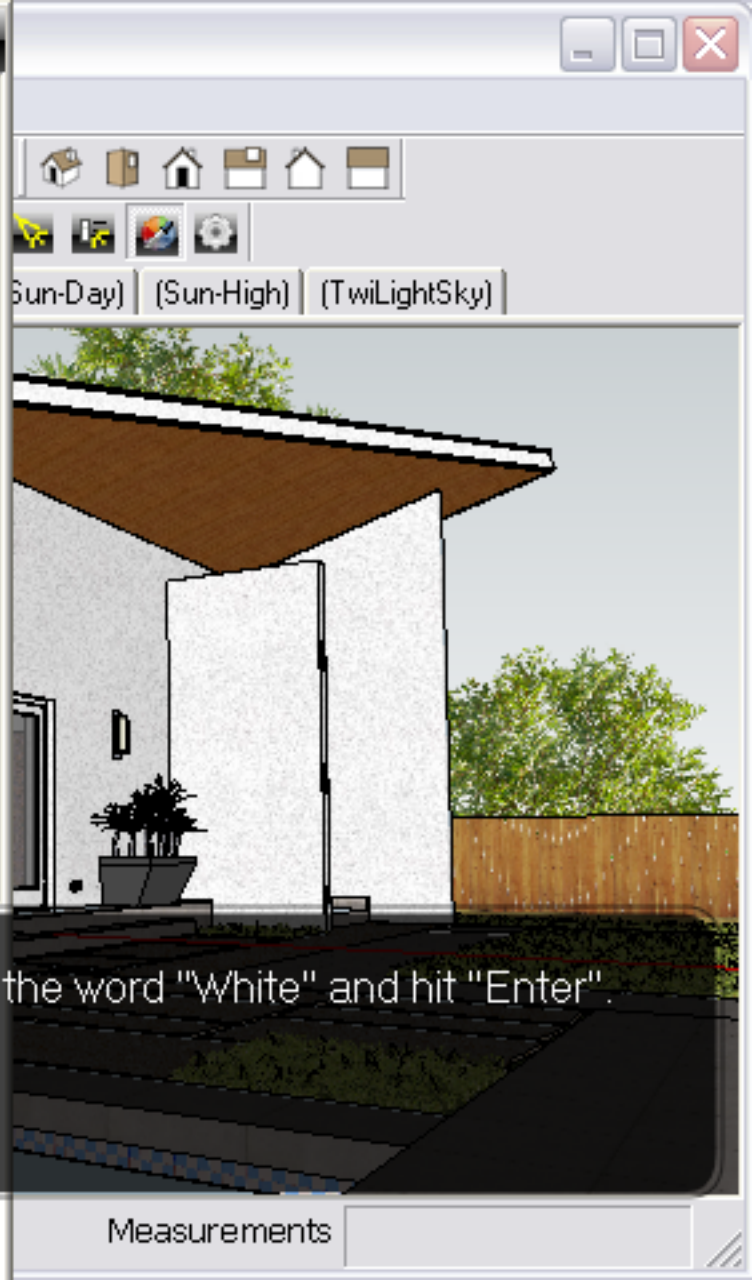
Reflection white

Bump Size: 0.100 Invert

Alpha 30.000

Index of Refraction: 1.333 Hard Edge Angle: 0

Shininess: 128.000 Edge Line: 0.100



Type the word "White" and hit "Enter".

Measurements

Edit Library

Color white

Color Browse

Reflection white

Color Browse

Bump Size: 0.100 Invert

No Texture Browse

Alpha 30.000

Index of Refraction: 1.333

Shininess: 128.000

SSS Density: 1.000

Cast Shadow

Hard Edge Angle: 0

Edge Line: 0.100

Weld Vertices

Use Edge Lines



For Pool Water, let's turn off 'Cast Shadow'. This feature will work with the "Easy" Render Methods 1-8.

Measurements

Edit Library

Color white

Color Browse

Reflection white

Color Browse

Bump Size: 0.100 Invert

No Texture Browse

Alpha 30.000

Index of Refraction: 1.333

Shininess: 128.000

SSS Density: 1.000

Cast Shadow

Hard Edge Angle: 0

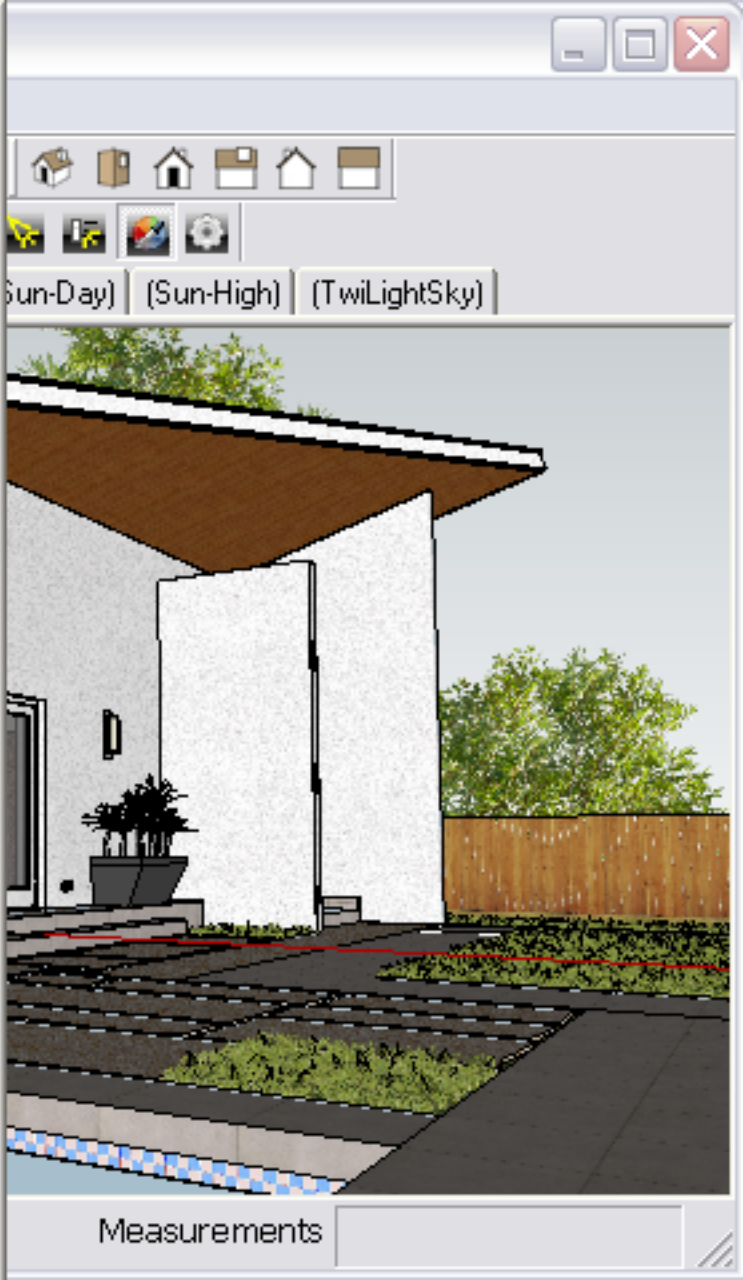
Edge Line: 0.100

Weld Vertices

Use Edge Lines

Click

← →



Edit Library

Color white

Color Browse

Reflection white

Color Browse

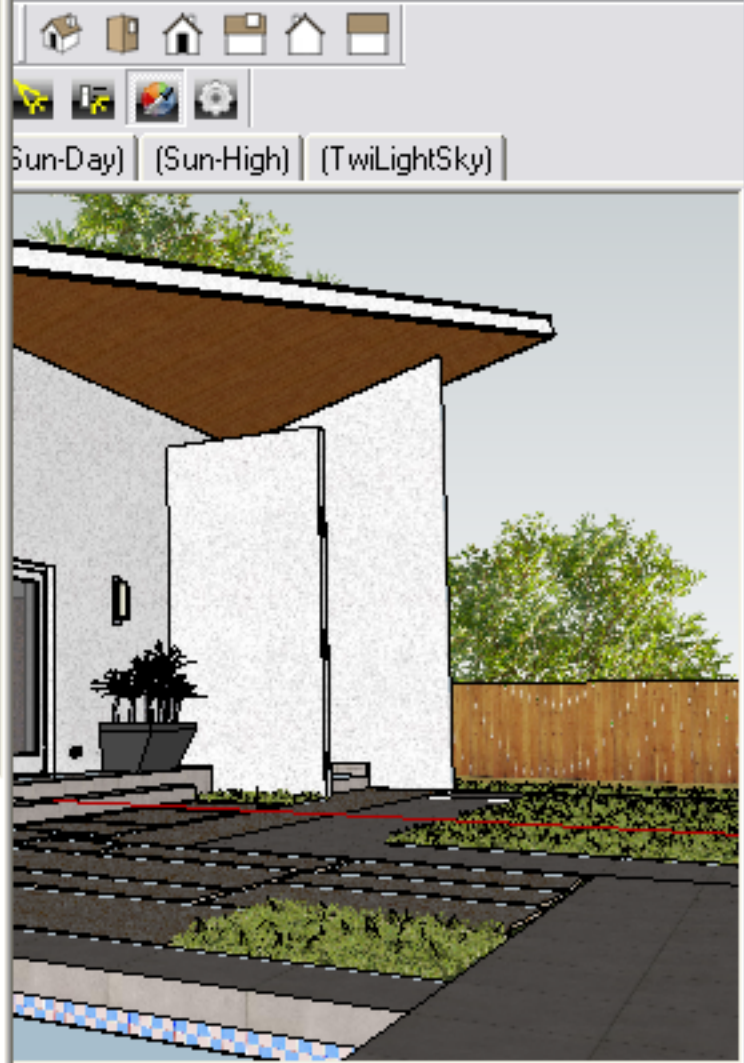
Bump Size: 0.100 Invert

No Texture Browse

Alpha 30.000

Index of Refraction: 1.333 Hard Edge Angle: 0

Shininess: 128.000 Edge Line: 0.100

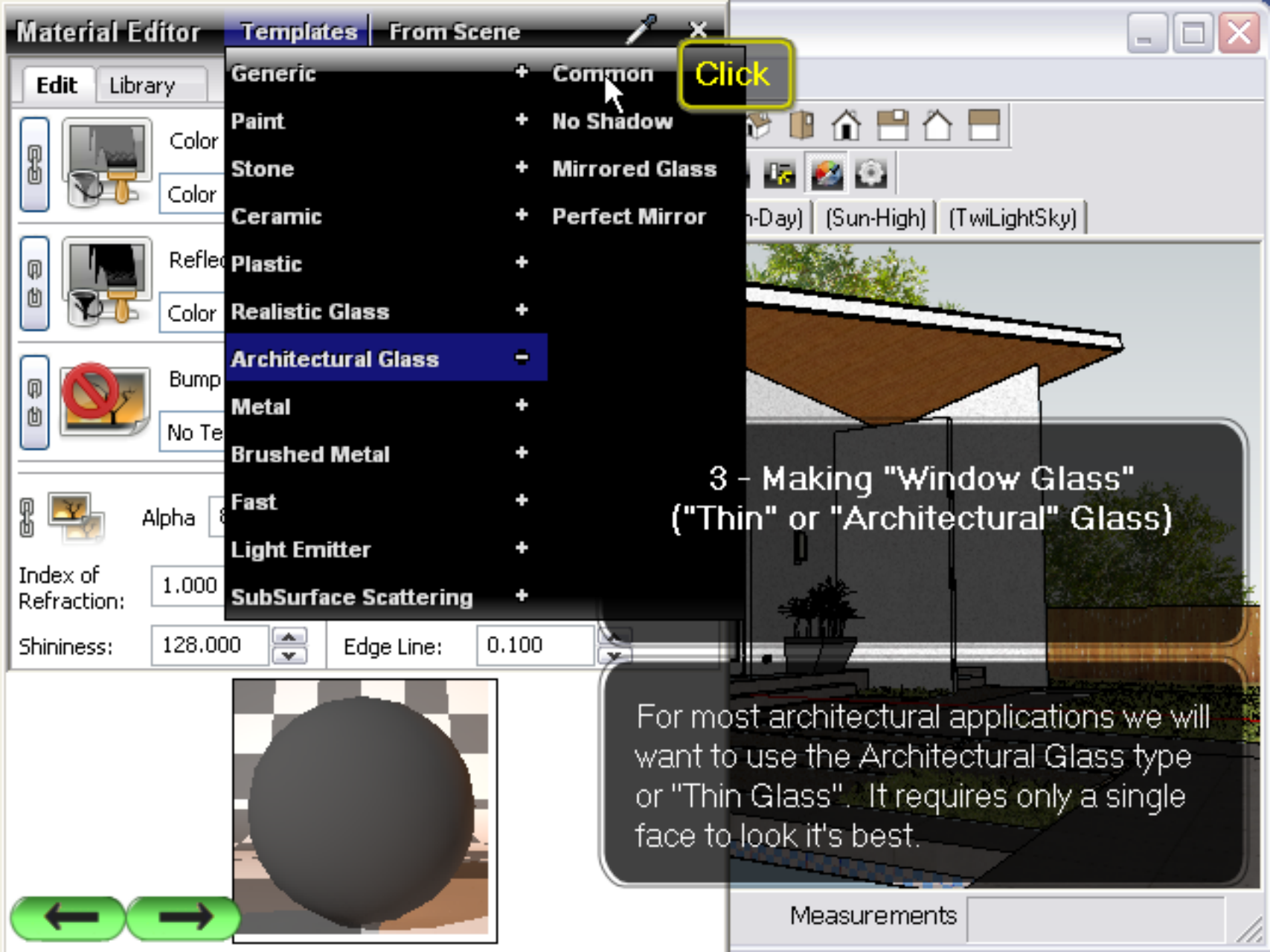


Measurements



Hover over face to display tip with its

Measurements



Material Editor | **Templates** | From Scene

- Generic + Common
- Paint + No Shadow
- Stone + Mirrored Glass
- Ceramic + Perfect Mirror
- Plastic +
- Realistic Glass +
- Architectural Glass -**
- Metal +
- Brushed Metal +
- Fast +
- Light Emitter +
- SubSurface Scattering +

Click

3 - Making "Window Glass" ("Thin" or "Architectural" Glass)

For most architectural applications we will want to use the Architectural Glass type or "Thin Glass". It requires only a single face to look it's best.

Edit | Library

Color

Color

Reflected

Color

Bump

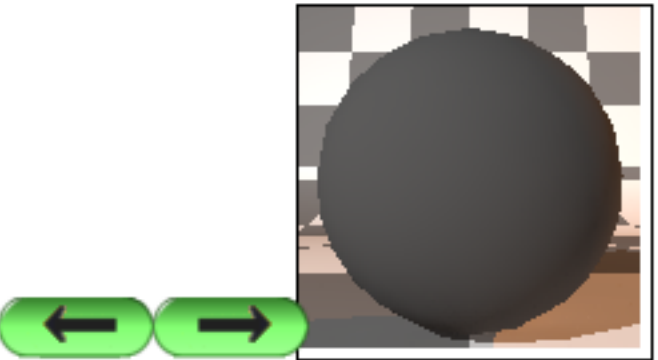
No Texture

Alpha

Index of Refraction: 1.000


Shininess: 128.000



Edge Line: 0.100



Measurements

Edit Library

Color rgb(110, 110, 110) 
Color  C:\Documents and Settings\... Browse

Bump  Size: 0.000 Invert
No Texture  C:\Documents and Settings\... Browse

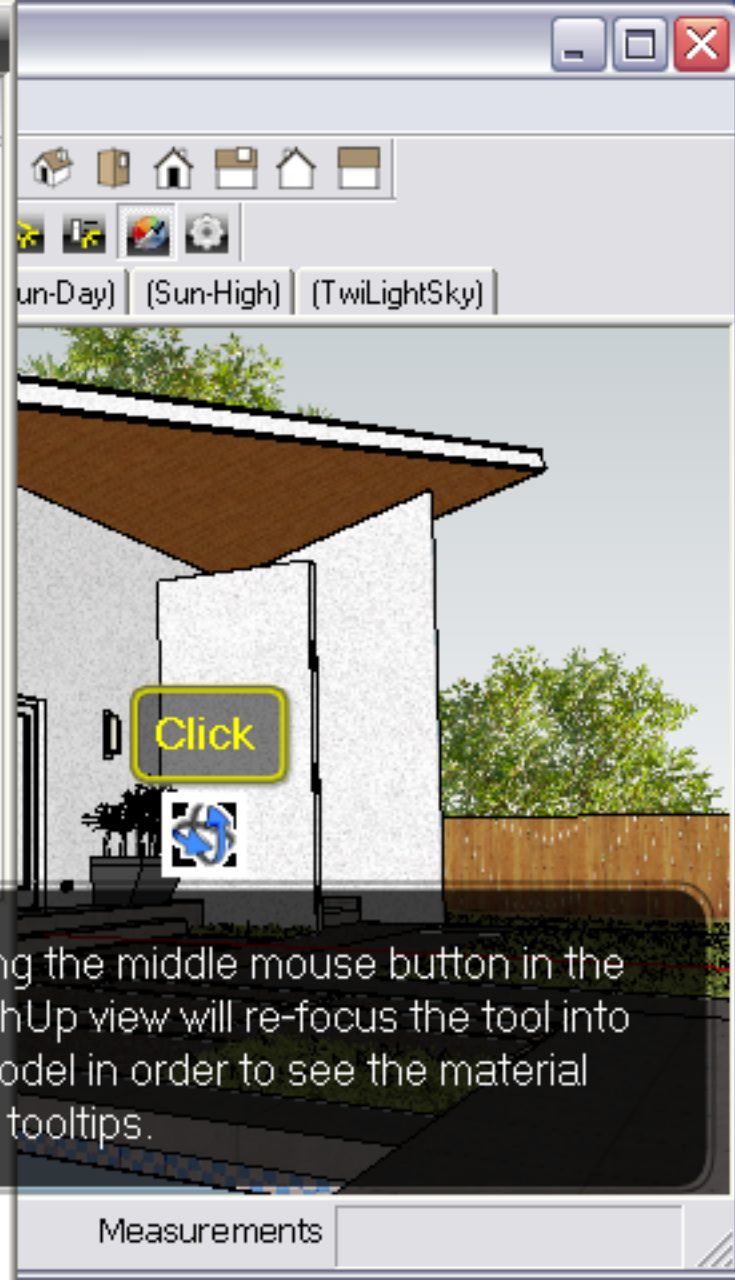
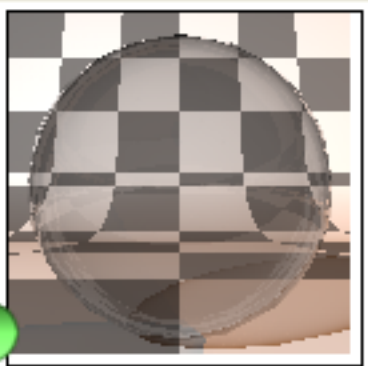
Alpha 10.000

Index of Refraction: 1.520 Hard Edge Angle: 0

Shininess: 128.000 Edge Line: 0.100

SSS Density: 1.000 Weld Vertices
 Use Edge Lines


Cast Shadow




Clicking the middle mouse button in the SketchUp view will re-focus the tool into the model in order to see the material name tooltips.

Measurements

Edit Library 

  Color 
Color

  Bump Size:
No Texture


  Alpha



Index of Refraction: Hard Edge Angle:

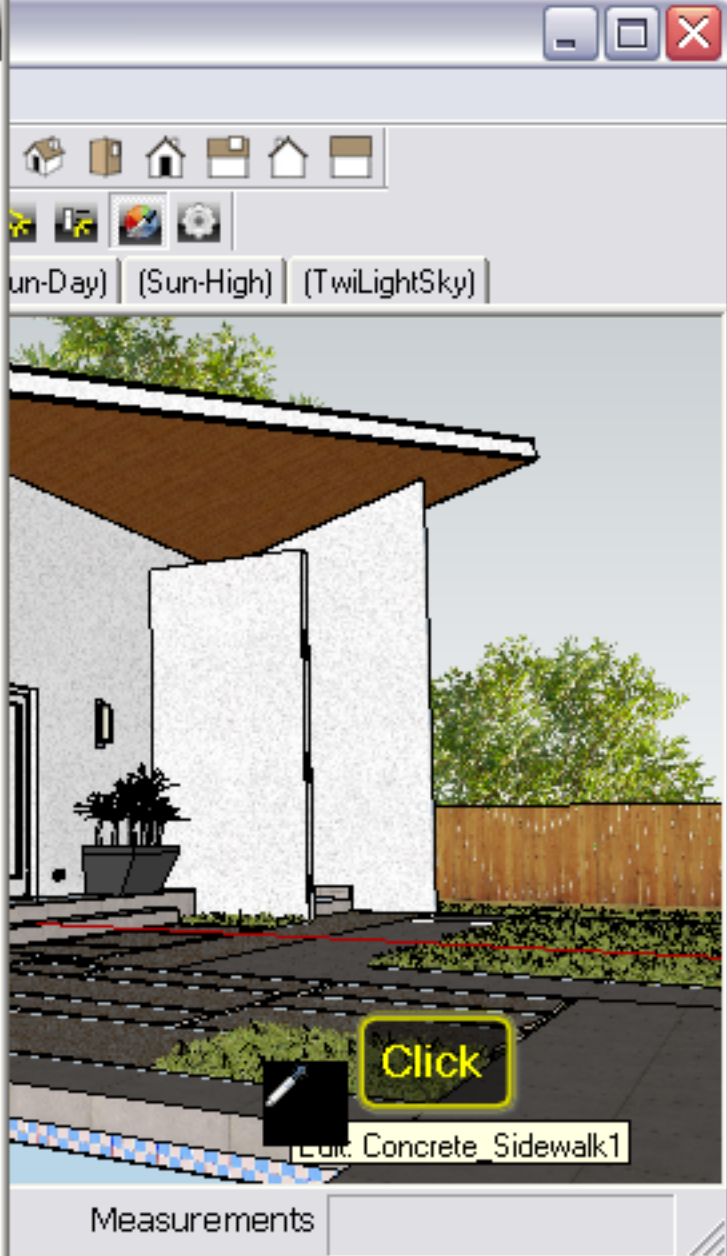
Shininess: Edge Line:


SSS Density: Weld Vertices
 Use Edge Lines


Cast Shadow





Home icons: 

Tools icons: 

Lighting: (Sun-Day) (Sun-High) (TwilightSky)

Click

Edit: Concrete Sidewalk1

Measurements

Material Editor | **Templates** | From Scene

Edit | Library

Color [Image]

Texture [Image]

Reflection [Image]

Color [Image]

Bump [Image]

No Texture [Image]

Alpha [Image]

Index of Refraction: 1.000

Shininess: 128.000 | Edge Line: 0.100

- Generic + Natural
- Paint + Rough
- Stone** - Polished
- Ceramic +
- Plastic +
- Realistic Glass +
- Architectural Glass +
- Metal +
- Brushed Metal +
- Fast +
- Light Emitter +
- SubSurface Scattering +

Click

Home | Home | Home | Home | Home

Lighting | Settings

(Sun-Day) | (Sun-High) | (TwilightSky)

Measurements



Edit Library

Color rgb(110, 110, 110)

Texture C:\Documents and Settings\...

Reflection white

Color

Bump Size: 1.000 Invert

No Texture

Alpha 100.000

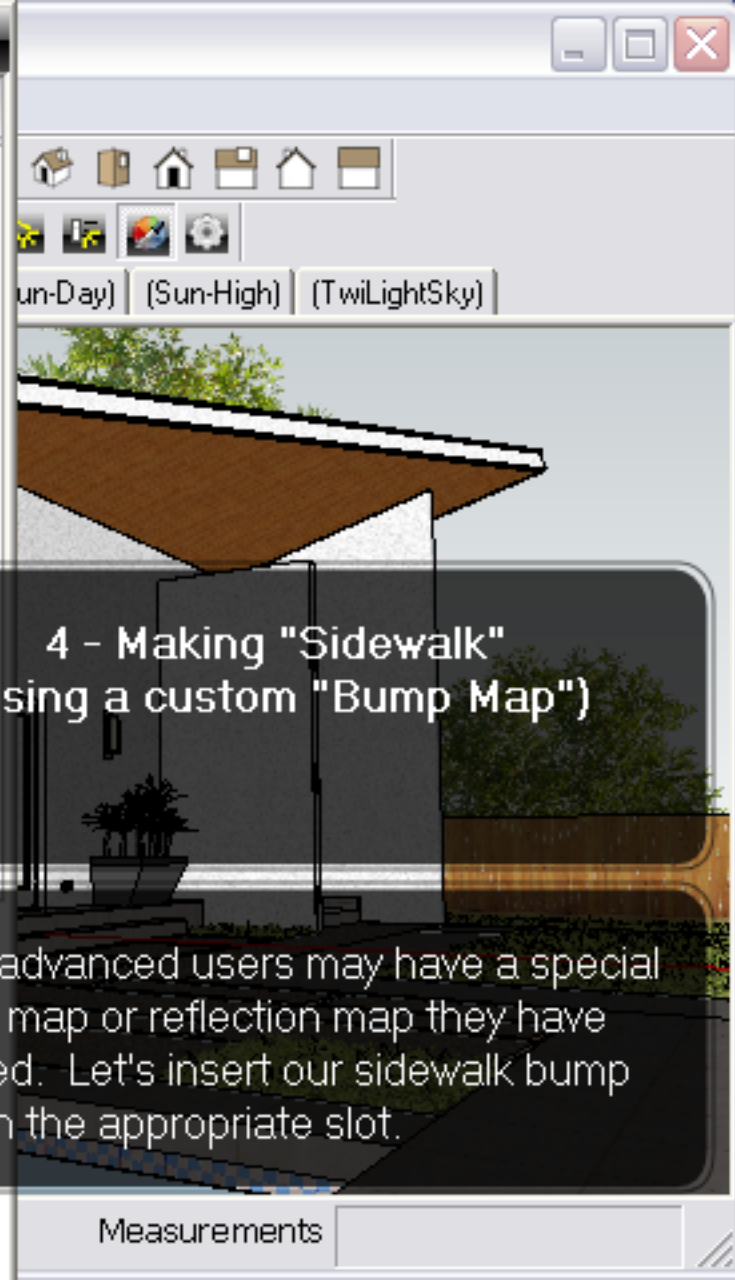
Index of Refraction: 1.100 **Hard Edge Angle:** 0

Shininess: 10.000 **Edge Line:** 0.100




Click

4 - Making "Sidewalk" (using a custom "Bump Map")



More advanced users may have a special bump map or reflection map they have created. Let's insert our sidewalk bump map in the appropriate slot.



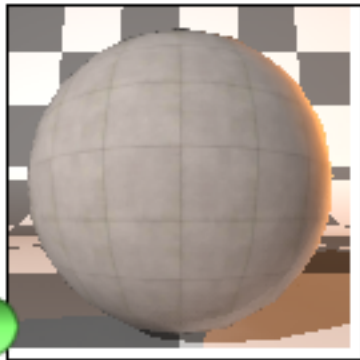
Edit Library

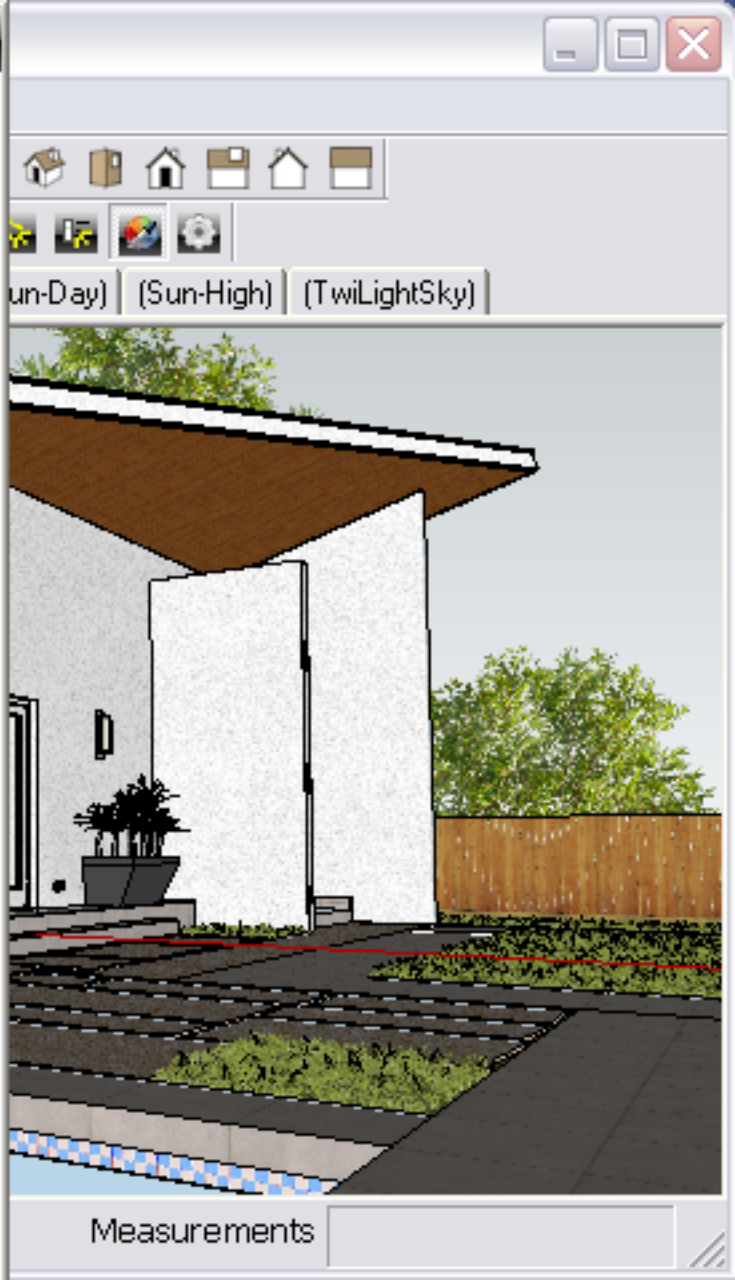
  Color 
Texture

  Reflection 
Color




  Bump Size: Invert

Index of Refraction: Hard Edge Angle
Shininess: Edge Line







Edit Library

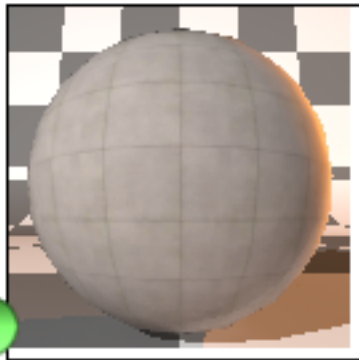
  Color 
Texture

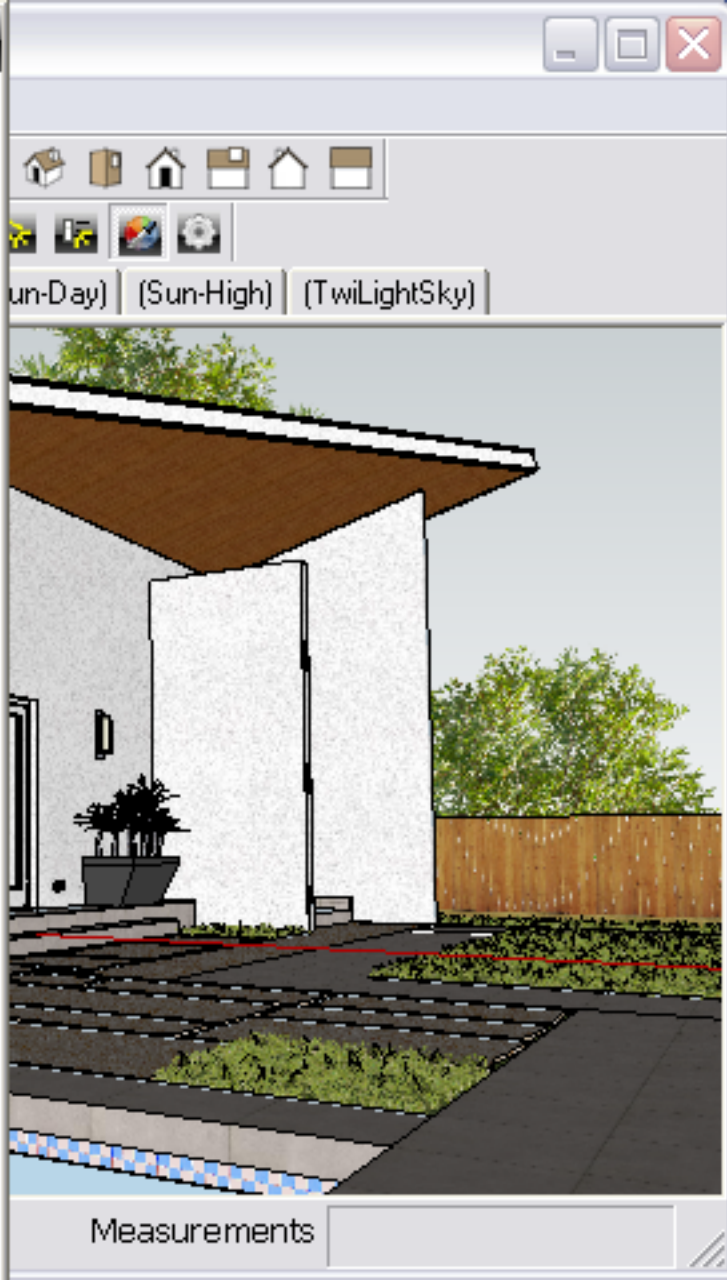
  Reflection 
Color

  Bump Size: Invert
Texture

  Alpha

Index of Refraction: Hard Edge Angle:
Shininess: Edge Line:





Select an image texture



Look in: Exterior_Pool



My Recent Documents



Desktop



My Documents



My Computer



Index Refra Shini...

Exterior_Pool_Render...	LightComponents	TwilightVegetation
Concrete_Sidewalk_Bu...	Concrete_Sidewalk_No...	Grass_Twilight.png

File name: Concrete_Sidewalk_Bump.jpg

Files of type: Common (*.jpg, *.jpeg, *.png, *.bmp, *.gif, *.tif, ...)

Open

Cancel

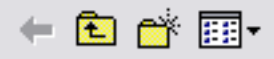


Measurements

Select an image texture



Look in: Exterior_Pool



My Recent Documents



Desktop



My Documents



My Computer



Index Refra Shini



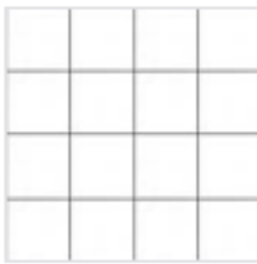
Exterior_Pool_Render...



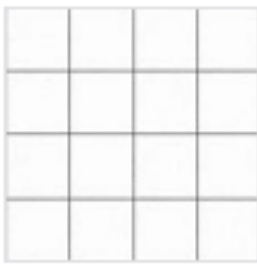
LightComponents



TwilightVegetation



Concrete_Sidewalk_Bu...



Concrete_Sidewalk_No...



Grass_Twilight.png



File name: Concrete_Sidewalk_Bump.jpg

Files of type: Common (*.jpg, *.jpeg, *.png, *.bmp, *.gif, *.tif, *)










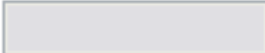
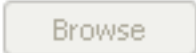






Open













Cancel



Measurements

Edit Library 

	 Color	rgb(110, 110, 110) 
	 Texture	C:\Documents and S... 
	 Reflection	white 
	 Color	 
	 Bump	Size: 1.000   <input type="checkbox"/> Invert
	 Texture	C:\Documents and S... 

	 Alpha	100.000  
Index of Refraction:	1.100  	Hard Edge Angle: 0  
	Shininess: 10.000  	Edge Line: 0.100  

Sets the amount of shininess in the material which effects how reflective it is.



If we find our material too shiny, we can adjust it here... or apply a different template. Applying another template will not overwrite the bump map definition.

Click



Close window.

Edit | Library

Color

Texture

Reflection

Color

Bump

Texture

Alpha

Index of Refraction: **Hard Edge Angle:**

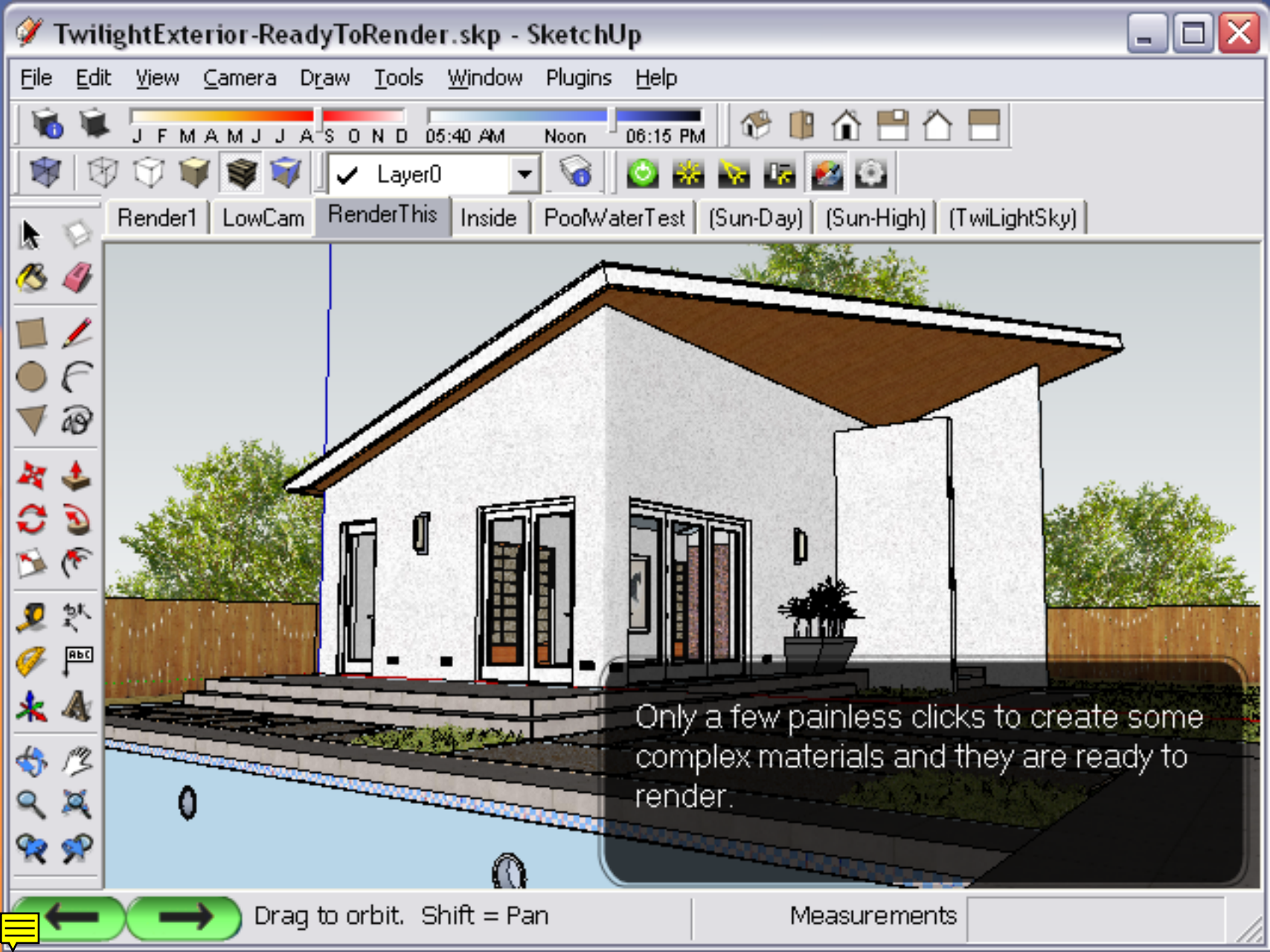
Shininess: **Edge Line:**



(Sun-Day) | (Sun-High) | (TwilightSky)



Measurements



TwilightExterior-ReadyToRender.skp - SketchUp

File Edit View Camera Draw Tools Window Plugins Help

J F M A M J J A S O N D 05:40 AM Noon 06:15 PM

Layer0

Render1 LowCam RenderThis Inside PoolWaterTest (Sun-Day) (Sun-High) (TwilightSky)

Only a few painless clicks to create some complex materials and they are ready to render.

Drag to orbit. Shift = Pan

Measurements