Rock Builder

The innovative stone generator for Unity

Version 1.0 January 2020

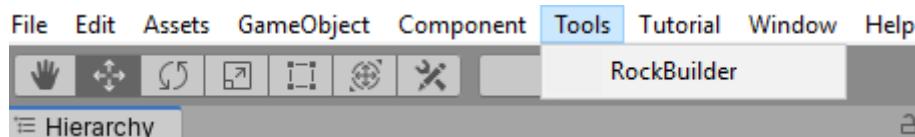# Table of Contents

Start

After you have downloaded the Rock Builder tool from the Asset Store, you can find and open it under the "Tools" tab in Unity.

In a first step, you have to choose, what kind of stone you want to build. In the main tab bar from the Rock Builder tool, you can see 3 different tabs. Click on the last one, if you need "Help" or if you have any questions or found a bug. Feel free to send us an email, we will try to give you an answer as soon as possible.
The other 2 tabs are the ones you need, to generate "Rocks" or "Gemstones".
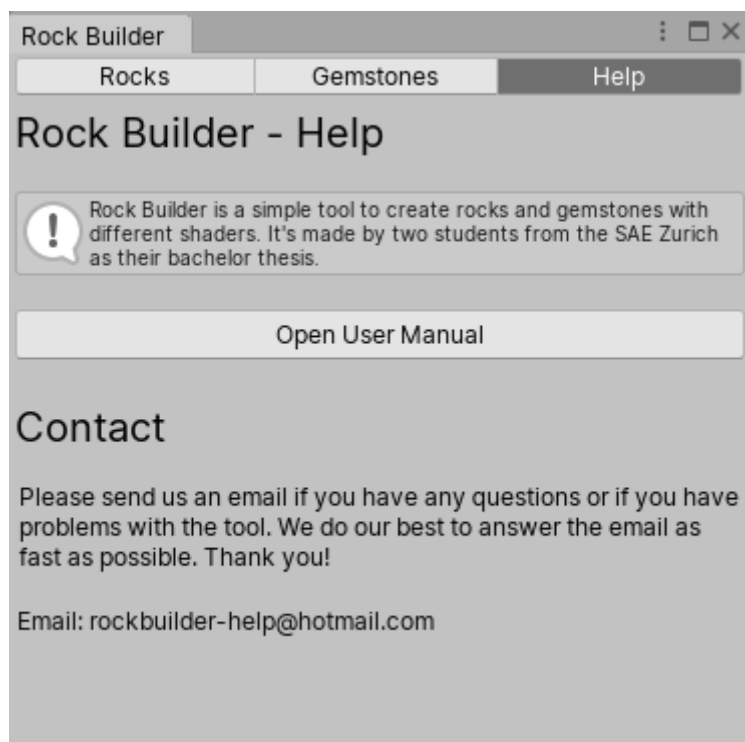
Click on "Rocks", if you just want to build an average looking rock. Click on "Gemstones", if you want to build special stones like crystals or diamonds.
In the next 2 chapters, we're going to explain all the settings in detail and show you, how to use them correctly.

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Rocks

First name the object. The default name is "Rock_01". You can also rename the object later in the scene hierarchy.

After that, you have to choose the shape. The "Custom" shape is unfortunately not available in the first release. This feature will follow as soon as possible.

If you click on the "Standard" button, two new buttons will show up. After a click on one of these two buttons, all the other settings will appear.
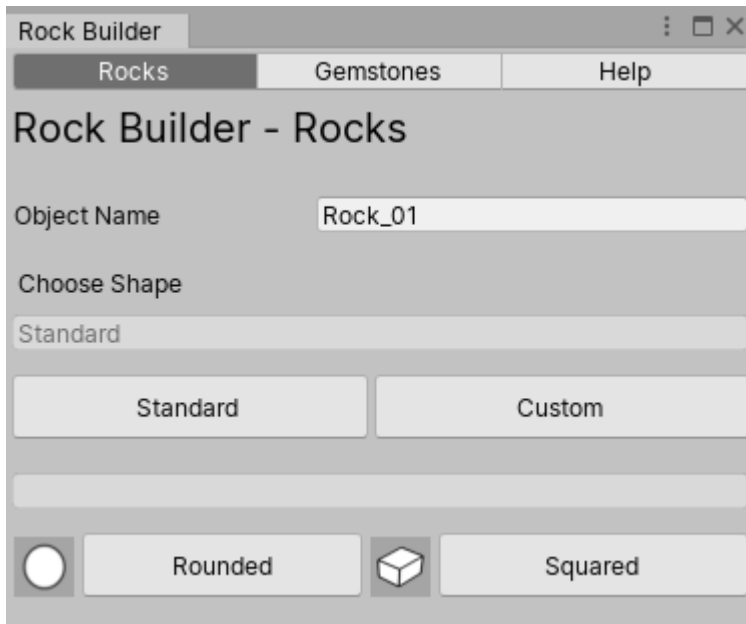
Here's a picture with the two default shapes (previews). On the left you can see the rounded and on the right the squared shape.
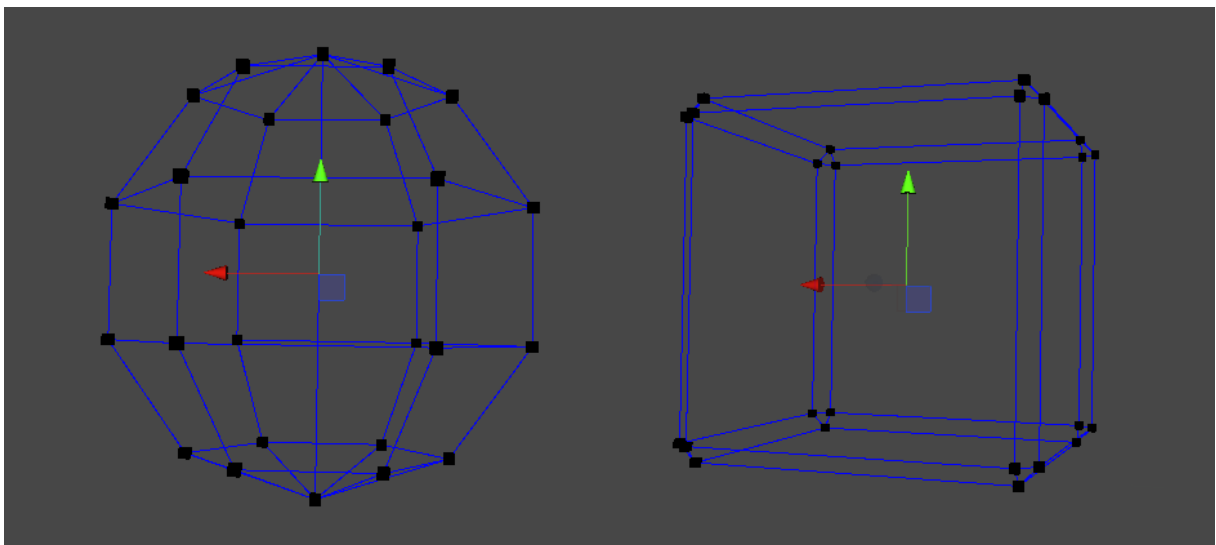
Rocks Rounded Settings

Edges: Possible values between 6 and 100. The more edges the rock has, the more rounded and detailed it looks.

Height: Possible values between 0.01 and 1000. The bigger the value, the taller the height of the whole rock.

Width: Possible values between 0.01 and 1000. This value changes the width of the rock.

Depth: Possible values between 0.01 and 1000. This value changes the depth of the rock.

Noise: Possible values between 0 and 1000. This value changes the strength of the noise effect. This effect is not visible in the preview, you have to generate the rock first.
The value of 0.1 looks the most natural.

Collider: If you check the box, the generated rock will have a mesh collider.

LODs: Possible values between 0 and 3. If the rock should have one or more LODs (Level of Detail), change the value to the desired number. After the object is generated, you can see the LOD group in the inspector window and change the settings as you would like to have them.

Choose Material: Click on the icon on the right, to choose a material. In the select material window, you can type "RB" into the search field and all of our 10 supplied materials will appear. You can also choose one of your own materials.

Let's rock: Click this button, to generate the rock. Before this button is clicked, the object is just a preview. You can always change the settings and click the let's rock button again to update the model.

Rocks Squared Settings

Divider: Possible values between 1 and 50. The higher the value, the more divided the faces will be and the more detailed the noise effect will look.

Height: Possible values between 0.01 and 1000. The bigger the value, the taller the height of the whole rock.

Width: Possible values between 0.01 and 1000. This value changes the width of the rock.

Depth: Possible values between 0.01 and 1000. This value changes the depth of the rock.

Bevel Size: Possible values between 0 and 1000. This value changes the size of the bevel.

Noise: Possible values between 0 and 1000. This value changes the strength of the noise effect. This effect is not visible in the preview, you have to generate the rock first.
The value of 0.1 looks the most natural.

Collider: If you check the box, the generated rock will have a mesh collider.

LODs: Possible values between 0 and 3. If the rock should have one or more LODs (Level of Detail), change the value to the desired number. After the object is generated, you can see the LOD group in the inspector window and change the settings as you would like to have them.

Choose Material: Click on the icon on the right, to choose a material. In the select material window, you can type "RB" into the search field and all of our 10 supplied materials will appear. You can also choose one of your own materials.

Let's rock: Click this button, to generate the rock. Before this button is clicked, the object is just a preview. You can always change the settings and click the let's rock button again to update the model.

Gemstones

First name the object. The default name is "Gemstone_01". You can also rename the object later in the scene hierarchy.

After that, you have to choose the shape. Click on the button right to the icon, to choose the kind of gemstone, you want to build. After the first Click, all the other settings will appear.

Here's a picture with all the three default shapes (previews). On the left you can see the crystal, in the middle the gem and on the right the diamond shape.

Gemstones Crystal Settings

Edges: Possible values between 3 and 200. The more edges the crystal has, the more rounded and detailed it looks.

Radius: Possible values between 0.01 and 1000. The bigger the value, the wider the radius of the crystal.

Peak Height: Possible values between 0.01 and 1000. This value changes the tip height of the crystal (the one under the body and also the upper one).

Body Height: Possible values between 0.01 and 1000. This value changes the height of the crystals middle part, its body.

Smooth: If you check the box, the edges will be smooth. If you leave the box unchecked, the generated crystal will have hard edges.

Collider: If you check the box, the generated crystal will have a mesh collider.

LODs: Possible values between 0 and 3. If the crystal should have one or more LODs (Level of Detail), change the value to the desired number. After the object is generated, you can see the LOD group in the inspector window and change the settings as you would like to have them.

Choose Material: Click on the icon on the right, to choose a material. In the select material window, you can type "RB" into the search field and all of our 10 supplied materials will appear. You can also choose one of your own materials.

Let's rock: Click this button, to generate the crystal. Before this button is clicked, the object is just a preview. You can always change the settings and click the let's rock button again to update the model.
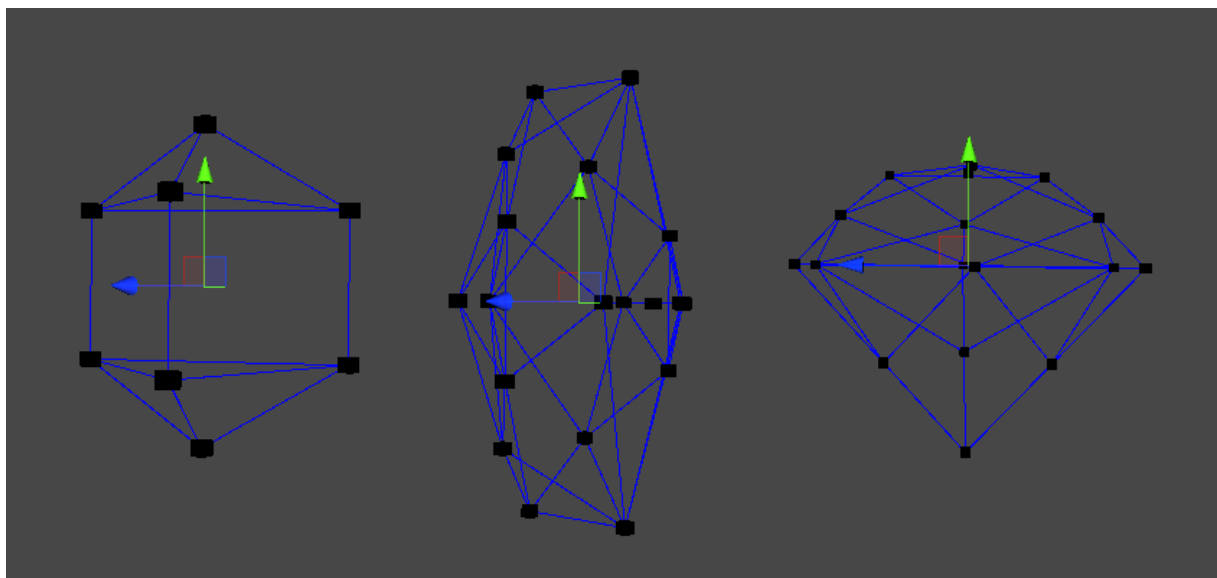
Gemstones Gem Settings

Edges: Possible values between 6 and 200. The more edges the gem has, the more rounded and detailed it looks.

Height: Possible values between 0.01 and 1000. The bigger the value, the taller the height of the whole gem.

Width: Possible values between 0.01 and 1000. This value changes the width of the gem.

Depth: Possible values between 0.01 and 1000. This value changes the depth of the gem.

Smooth: If you check the box, the edges will be smooth. If you leave the box unchecked, the generated gem will have hard edges.

Collider: If you check the box, the generated gem will have a mesh collider.

LODs: Possible values between 0 and 3. If the gem should have one or more LODs (Level of Detail), change the value to the desired number. After the object is generated, you can see the LOD group in the inspector window and change the settings as you would like to have them.

Choose Material: Click on the icon on the right, to choose a material. In the select material window, you can type "RB" into the search field and all of our 10 supplied materials will appear. You can also choose one of your own materials.

Let's rock: Click this button, to generate the gem. Before this button is clicked, the object is just a preview. You can always change the settings and click the let's rock button again to update the model.

Gemstones Diamond Settings

Edges	●―――――――――	6
Radius	1	
Crown Height	0.5	
Body Height	1	
Smooth	☐	
Collider	☐	
LODs	●―――――――	0

Choose Material

○ None (Material)	◉

Let's rock!

Edges: Possible values between 6 and 200. The more edges the diamond has, the more rounded and detailed it looks. Only even numbers are allowed.

Radius: Possible values between 0.01 and 1000. The bigger the value, the wider the radius of the diamond.

Crown Height: Possible values between 0.01 and 1000. This value changes the height of the upper diamond part, its crown.

Body Height: Possible values between 0.01 and 1000. This value changes the height of the lower diamond part, its body.

Smooth: If you check the box, the edges will be smooth. If you leave the box unchecked, the generated diamond will have hard edges.

Collider: If you check the box, the generated diamond will have a mesh collider.

LODs: Possible values between 0 and 3. If the diamond should have one or more LODs (Level of Detail), change the value to the desired number. After the object is generated, you can see the LOD group in the inspector window and change the settings as you would like to have them.

Choose Material: Click on the icon on the right, to choose a material. In the select material window, you can type "RB" into the search field and all of our 10 supplied materials will appear. You can also choose one of your own materials.

Let's rock: Click this button, to generate the diamond. Before this button is clicked, the object is just a preview. You can always change the settings and click the let's rock button again to update the model.
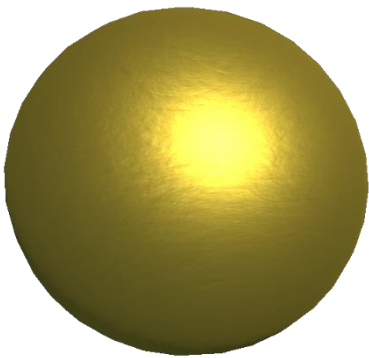
Shaders

There are 7 different shader graphs and 10 different materials. We will show you which material uses which shader graph and all the possible settings you can make.

Metal Shader

Materials with this shader graph:

RB_Mat_Gold

Base Color: The main color of the metal.

Normal Map: Normal texture of the material.

Normal Scale: The scale of the normal texture. Default is 1.

Normal Strength: The strength of the normal map effect. Default is 0,5.

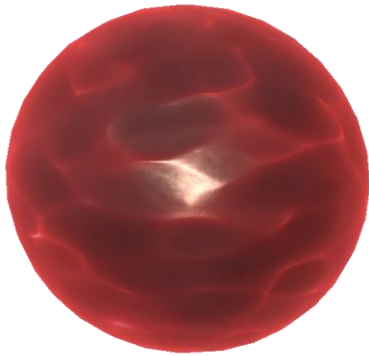Smoothness: The strength of the smoothness effect. Default is 0,5.

Metallic: The strength of the metallic effect. Default is 0,9.

Gem Shader

Materials with this shader graph:

RB_Mat_Ruby

Gem Texture: Albedo texture of the material.

Gem Scale: The scale of the albedo texture. Default is 1.

Fade Color: The color value of the fade effect on the edges.

Fade Power: The strength of the "Fade Color" effect. Default is 2,5.

Normal Map: Normal texture of the material.

Normal Scale: The scale of the normal texture. Default is 1.

Normal Strength: The strength of the normal map effect. Default is 1.

Smoothness: The strength of the smoothness effect. Default is 0,7.

Metallic: The strength of the metallic effect. Default is 0,1.

Transparency: The strength of the transparency effect. If this value is less than 1, you can see through the material. Default is 0,98.

Parallax Texture: The texture for the parallax effect. This effect looks like there's something inside the object.

Parallax Scale: The scale of the parallax texture. Default is 0,5.

Parallax Strength: The strength of the parallax texture. Default is 0,04.
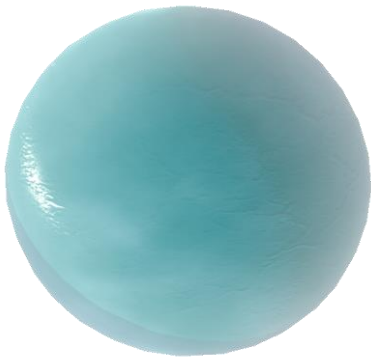
Parallax Offset: This value changes, how much the parallax effect is simulated. Default is -0,02.

Ice Shader

Materials with this shader graph:

RB_Mat_Ice

Ice Color: The main color of the ice.

Fade Color: The color value of the fade effect on the edges.

Fade Power: The strength of the "Fade Color" effect. Default is 1.

Normal Map: Normal texture of the material.

Normal Scale: The scale of the normal texture. Default is 1.

Normal Strength: The strength of the normal map effect. Default is 1.

Smoothness: The strength of the smoothness effect. Default is 0,8.

Transparency: The strength of the transparency effect. If this value is less than 1, you can see through the material. Default is 0,5.

Parallax Texture: The texture for the parallax effect. This effect looks like there's something inside the object.

Parallax Scale: The scale of the parallax texture. Default is 1.

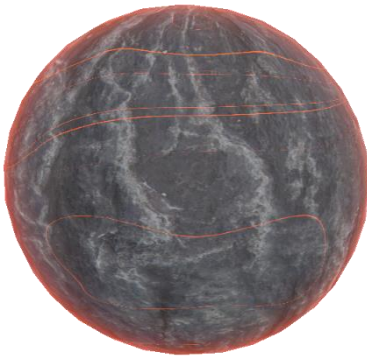Parallax Strength: The strength of the parallax texture. Default is 0,5.

Parallax Offset: This value changes, how much the parallax effect is simulated. Default is -0,02.

Lava Shader

Materials with this shader graph:

RB_Mat_Lavastone

Rock Texture: Albedo texture of the material.

Rock Scale: The scale of the albedo texture. Default is 1.

Fade Color: The color value of the fade effect on the edges.

Fade Power: The strength of the "Fade Color" effect. Default is 5.

Normal Map: Normal texture of the material.

Normal Scale: The scale of the normal texture. Default is 1.

Normal Strength: The strength of the normal map effect. Default is 1.

Smoothness: The strength of the smoothness effect. Default is 0,2.

AO Map: Ambient occlusion texture of the material.

AO Scale: The scale of the ambient occlusion texture. Default is 1.

Lava Color: The color of the lava cracks.

Lava Scale: The size of the lava cracks. The bigger the number, the smaller the cracks. Default is 10.

Lava Strength: This value changes the coverage of the lava cracks on the object. Default is 0,1.

Lava Speed: This value changes the animation speed of the lava cracks. Default is 0,4.

Pulsing Gem Shader

Materials with this shader graph:

RB_Mat_Pulsing_Gem

Gem Color: The main color of the gem.

Pulse Color: The color of the pulsing effect.

Pulse Power: The strength of the pulsing effect. Default is 3.

Pulse Speed: The animation speed of the pulsing effect. Default is 2.

Normal Map: Normal texture of the material.

Normal Scale: The scale of the normal texture. Default is 1.

Normal Strength: The strength of the normal map effect. Default is 1,5.

Smoothness: The strength of the smoothness effect. Default is 0,5.

Transparency: The strength of the transparency effect. If this value is less than 1, you can see through the material. Default is 0,95.

Parallax Texture: The texture for the parallax effect. This effect looks like there's something inside the object.

Parallax Scale: The scale of the parallax texture. Default is 1.

Parallax Strength: The strength of the parallax texture. Default is 0,5.

Parallax Offset: This value changes, how much the parallax effect is simulated. Default is -0,02.

Rock Shader

Materials with this shader graph:

RB_Mat_Boulder   RB_Mat_Desert

RB_Mat_Limestone   RB_Mat_Natural

Rock Texture: Albedo texture of the material.

Rock Scale: The scale of the albedo texture. Default is 1.

Normal Map: Normal texture of the material.

Normal Scale: The scale of the normal texture. Default is 1.

Normal Strength: The strength of the normal map effect. Default is 1.

Smoothness: The strength of the smoothness effect. Default is 0,3.

AO Map: Ambient occlusion texture of the material.

AO Scale: The scale of the ambient occlusion texture. Default is 1.

Snow Shader

Materials with this shader graph:

RB_Mat_Snowstone

Rock Texture: Albedo texture of the material.

Rock Scale: The scale of the albedo texture. Default is 1.

Normal Map: Normal texture of the material.

Normal Scale: The scale of the normal texture. Default is 1.

Normal Strength: The strength of the normal map effect. Default is 1.

Smoothness: The strength of the smoothness effect. Default is 0,1.

AO Map: Ambient occlusion texture of the material.

AO Scale: The scale of the ambient occlusion texture. Default is 1.

Snow Strength: This value changes the coverage of the snow on the surface. Default is 2.