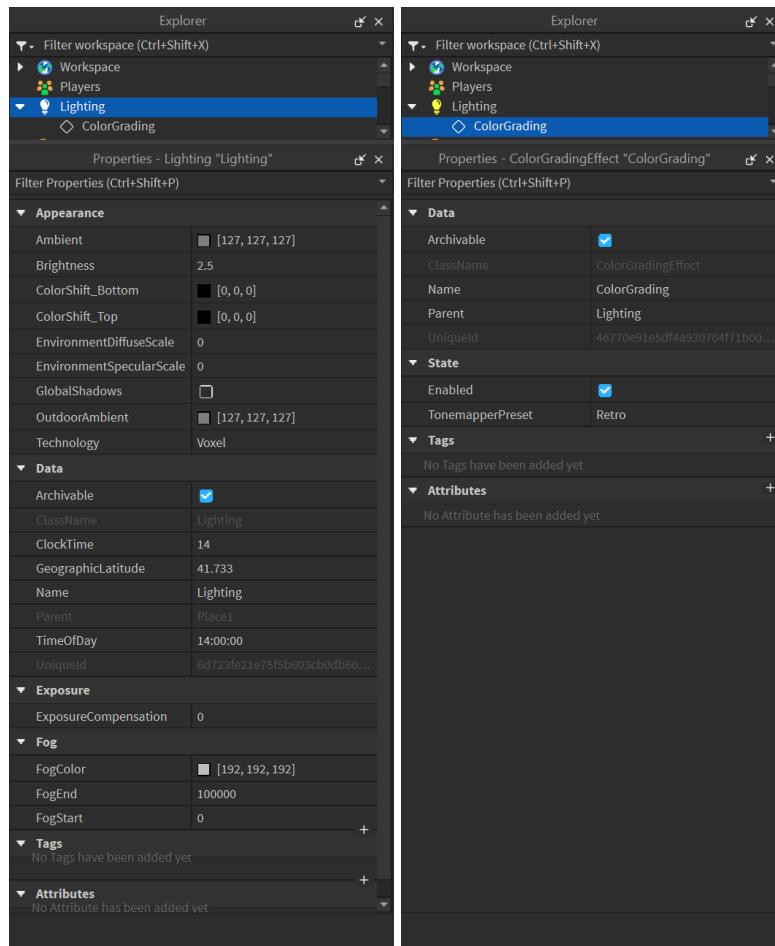


Roblox - Classic Building Guide

Instruction: The guide should be **followed carefully** and is intended for both beginner and experienced builders. I will include images of LEGO and its Roblox counterpart to illustrate their similarities, as you should think of the parts in Roblox Studio as “pseudo-LEGO” parts. The only prerequisite is understanding object [instance](#) and the [X/Y/Z axis](#).

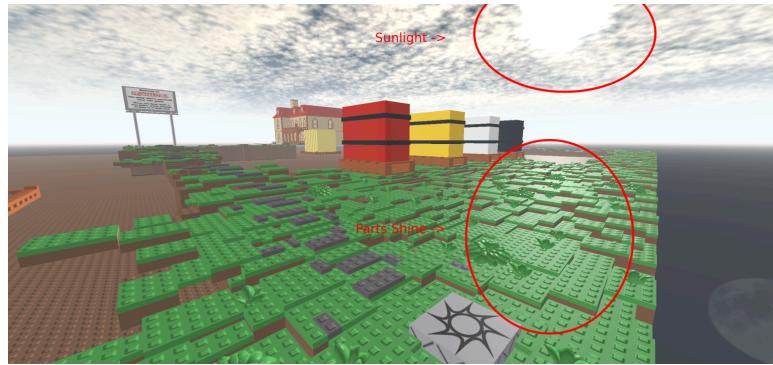
1. Lighting

Roblox's lighting engine is different compared to older versions. The left image shows my default preference for creating a new place. The lighting must have a ColorGrading instance with the TonemapperPreset set to "Retro," as shown in the right image. You can adjust the Lighting property values as needed.



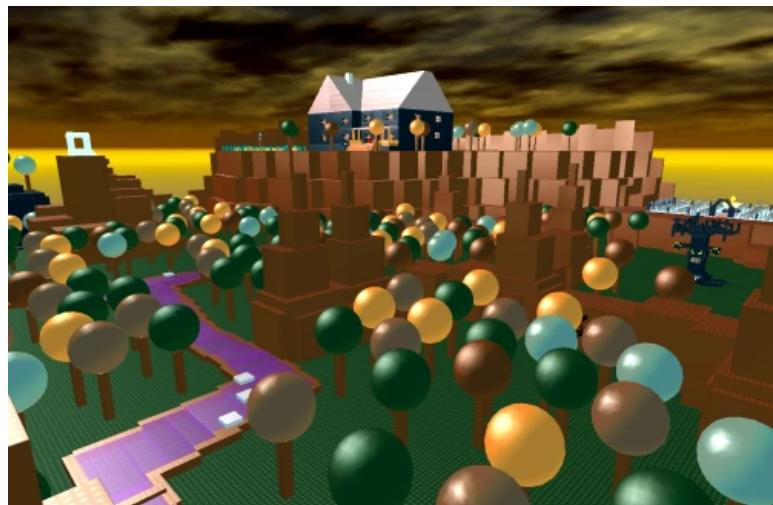
The left side presents the old lighting property from the classic era, while the right side uses the ColorGrading instance to adapt to modern standards.

I usually adjust the lighting to make the Roblox parts shine. This is achieved by changing ClockTime and GeographicLatitude in the Lighting property.



Example of changing ClockTime and GeographicLatitude setting in the Lighting property.

Looking at the 2007 ROBLOX rendering engine helps too.



From [Yorick's Resting Place](#) back in 2007 Roblox.



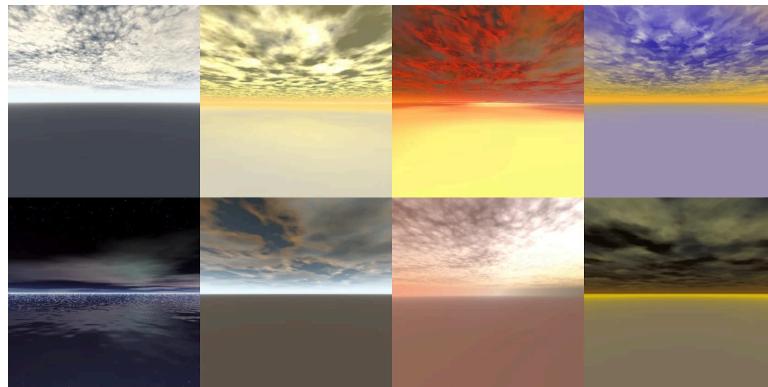
From ["A New Day Dawns..."](#) 2007 Roblox blog post.



From [Grey City](#) place back in 2007 Roblox.

2. Skybox

[Mark Alsip](#) created these skyboxes with [Bryce 7](#) software, which was uploaded to Roblox on April 11, 2007.



<https://create.roblox.com/store/asset/47339/Broken-Sky>

<https://create.roblox.com/store/asset/47347/Walls-Of-Autumn>

<https://create.roblox.com/store/asset/47410/Alien-Red>

<https://create.roblox.com/store/asset/311580/Winterness>

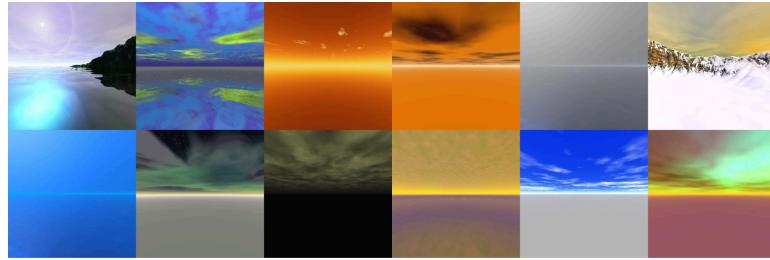
<https://create.roblox.com/store/asset/47344/Starry-Night>

<https://create.roblox.com/store/asset/311557/The-Great-West>

<https://create.roblox.com/store/asset/47346/The-Utter-East>

<https://create.roblox.com/store/asset/47343/Oblivion>

[Rombom](#) was a Roblox forum moderator who uploaded skyboxes belonging to [Mark Alsip's site](#). The list below contains the only preserved skyboxes.



<https://create.roblox.com/store/asset/108743092193471/Alien-Harbor-Skybox>

<https://create.roblox.com/store/asset/73737952108384/Ammonia-Skybox>

<https://create.roblox.com/store/asset/115749850572333/Armageddon-Skybox>

<https://create.roblox.com/store/asset/110647969895287/Backlit-Skybox>

<https://create.roblox.com/store/asset/88473811492122/Clear-Grey-Skybox>

<https://create.roblox.com/store/asset/72443200622092/Cold-w-mountains>

<https://create.roblox.com/store/asset/75260239981592/Light-Blue-Skybox>

<https://create.roblox.com/store/asset/74651702873710/Mysterious-Skybox>

<https://create.roblox.com/store/asset/107257505430848/Onimous-Skybox>

<https://create.roblox.com/store/asset/127581315250671/Random-Skybox>

<https://create.roblox.com/store/asset/133154146467731/Summer-Day-Skybox>

<https://create.roblox.com/store/asset/74829495982134/Yeller-Skybox>

Other skyboxes that appear to belong to [Mark Alsip](#).



<https://create.roblox.com/store/asset/107707022762708/autumnday1>

<https://create.roblox.com/store/asset/94831321187073/summerday1>

<https://create.roblox.com/store/asset/127575046313619/violet02>

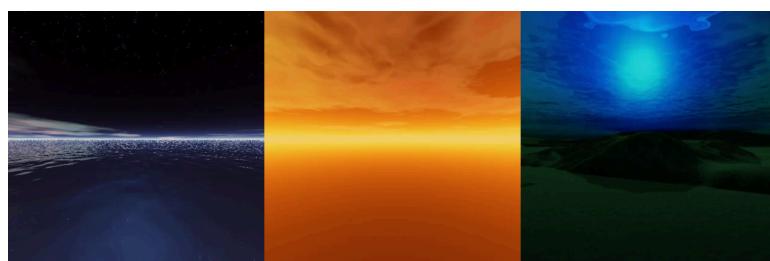
<https://create.roblox.com/store/asset/89001314806779/antarctica>

<https://create.roblox.com/store/asset/136868402397717/parfait>

<https://create.roblox.com/store/asset/132503658233433/Sunny-Sky>

<https://create.roblox.com/store/asset/87195549252016/Summer-Day-4>

These skyboxes originate from a [3D racer](#) game.

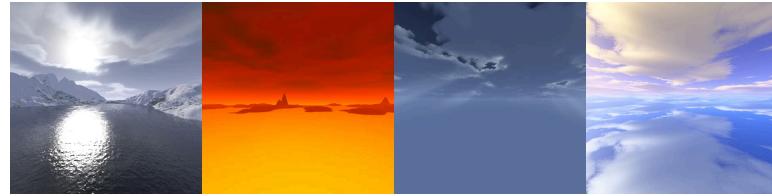


<https://create.roblox.com/store/asset/80612076591201/space>

<https://create.roblox.com/store/asset/138130199105905/sunwalk>

<https://create.roblox.com/store/asset/131375863385877/underwater>

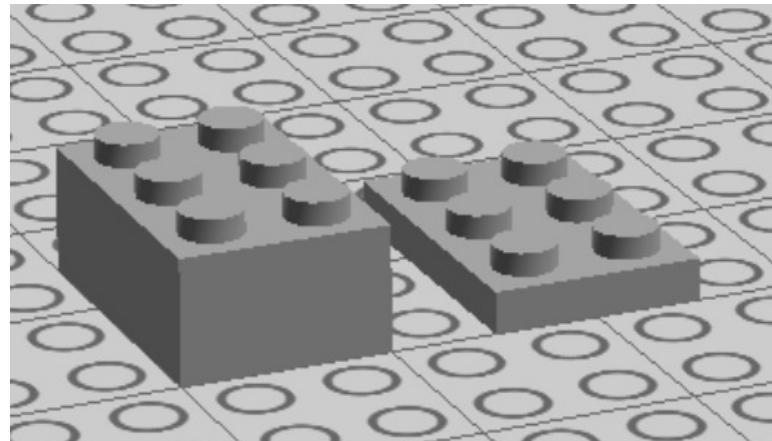
A noteworthy free alternative to [Bryce 7](#) software is [Terragen Classic](#).



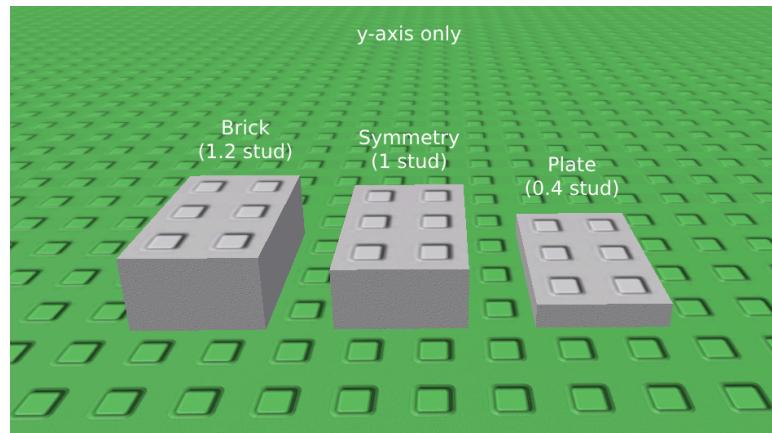
Terragen Skybox Sampler

3. FormFactor

At the time of Roblox's release, the [FormFactor](#) property for parts (inspired by LEGO part sizes) was used as the primary approach for building, but it was **deprecated** on May 5, 2016. These part sizes incrementally increase along their X/Z axis by 1 stud, while the Y-axis also grows in size incrementally. The specific size on the Y-axis is determined by the [FormFactor](#) property: Brick (1.2 stud), Symmetric (1 stud), and Plate (0.4 stud).



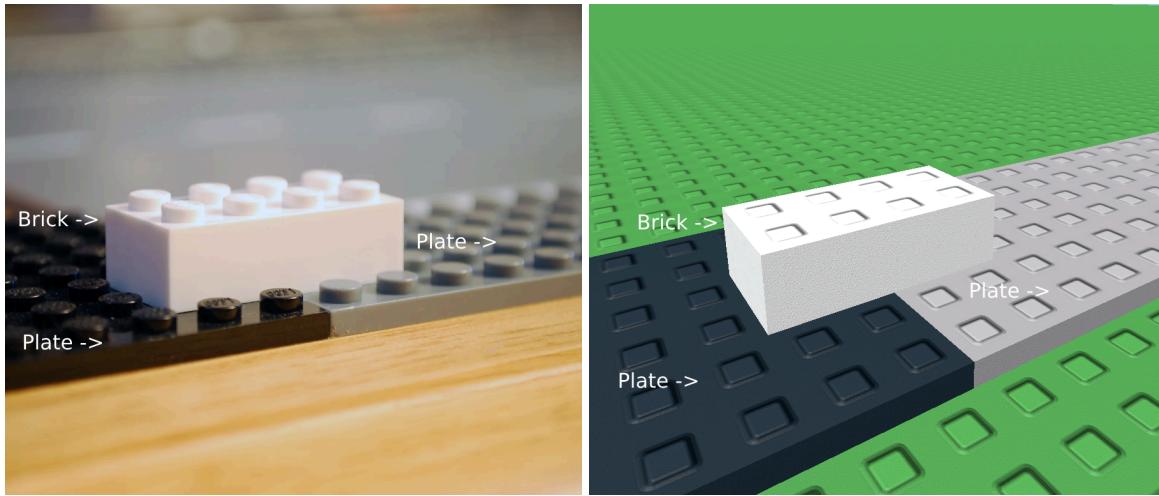
2x3 Brick and 2x3 Plate parts in LEGO.



Brick, Symmetry, Plate parts in Roblox. A showcase of deprecated FormFactor feature.

*The plugin that emulates the deprecated property can be installed here:
<https://create.roblox.com/store/asset/82258125263222/FormFactor-Plugin>*

Example of FormFactor parts being equivalent to LEGO parts.



The left side shows Brick and Plate parts in LEGO, whereas the right side exhibits Brick and Plate parts in Roblox.

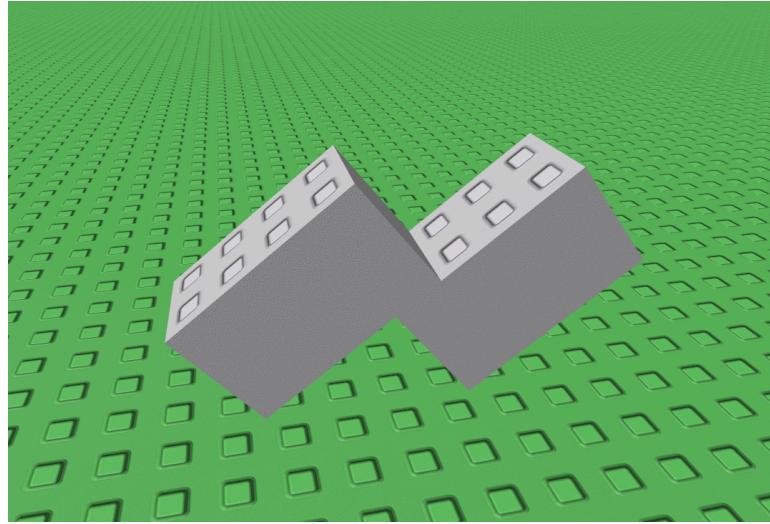
4. Surface Types

We'll be covering the functionalities of legacy surface types, which is referred to as the "**rule of cohesions**." The Roblox part must be unanchored and surface type must be correctly set to ensure proper logic. Although this feature is **deprecated** in modern Roblox, a plugin is available that replicates it: <https://create.roblox.com/store/asset/12518189074/Legacy-Joint-Creator>

In old Roblox, if a part studs surface is colliding with the inlet surface of another part, they will attach to each other, similar to how LEGO pieces connect. This connection is automatically established by inserting a [Snap](#) instance, which functions identically to a [Weld](#).

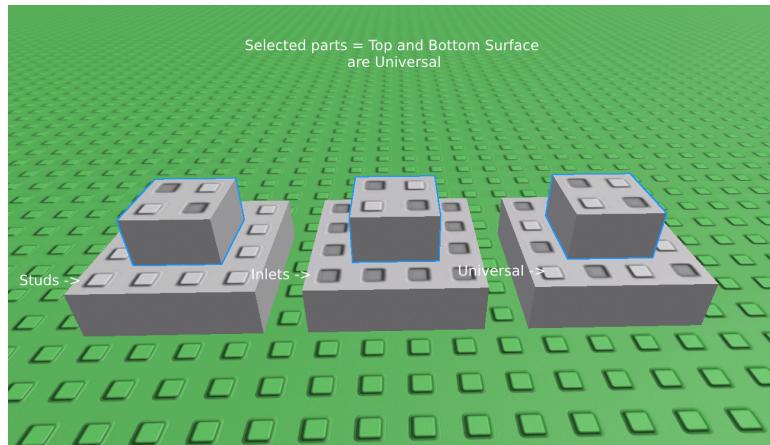


A hand putting LEGO 2x2 brick on top of a LEGO 2x2 brick.



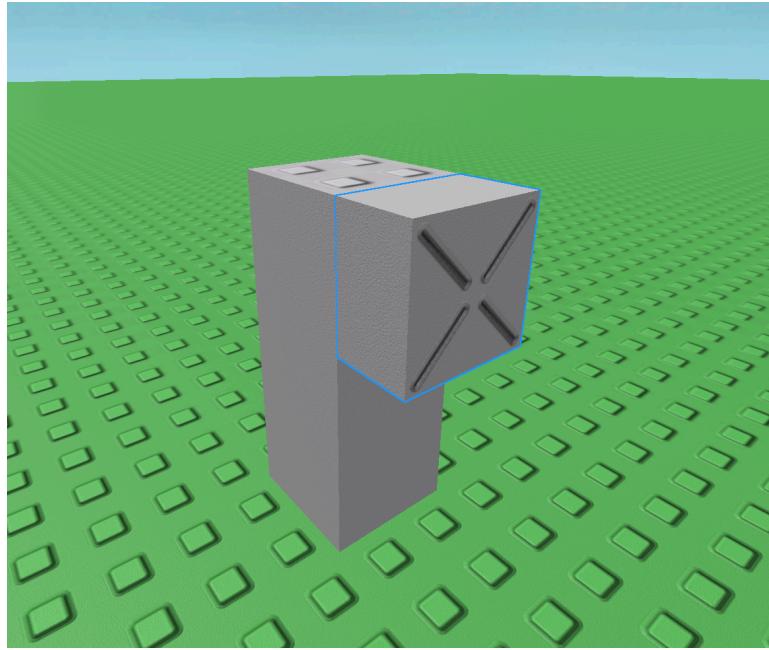
A demonstration of deprecated studs/inlet surface type functionality.

For universal surface type, it will attach to studs, inlet, and universal surface once they collide. This connection is established by inserting a [Snap](#) instance, which functions identically to a [Weld](#).



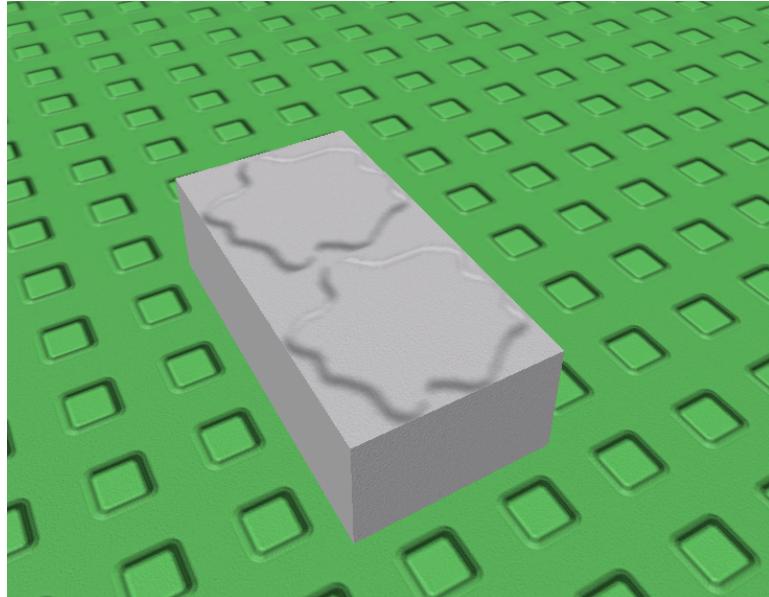
A demonstration of deprecated universal surface type functionality.

For weld surface type, it ensures that two parts are attached to each other by inserting a [Weld](#) instance to establish the connection.



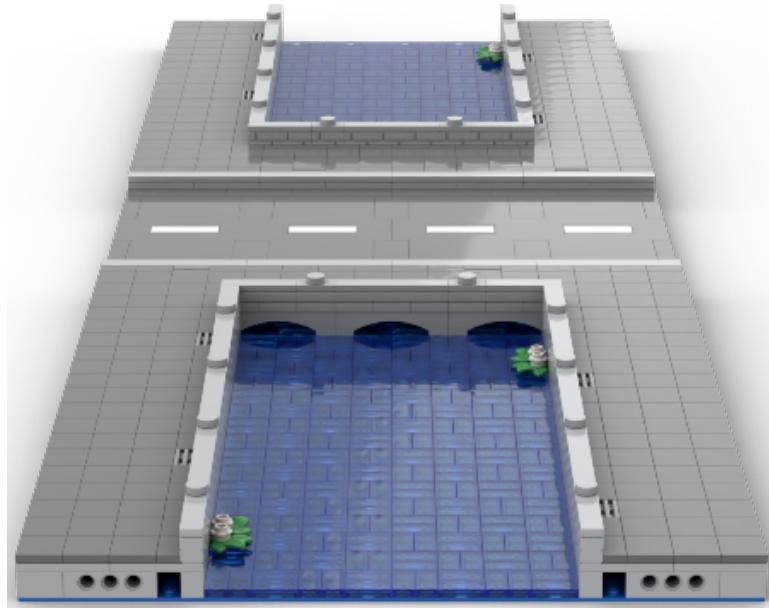
A demonstration of deprecated weld surface type functionality.

The glue surface type holds two parts together similarly to [Weld](#), but it can break when enough force is applied. This connection is established by inserting a [Glue](#) instance.



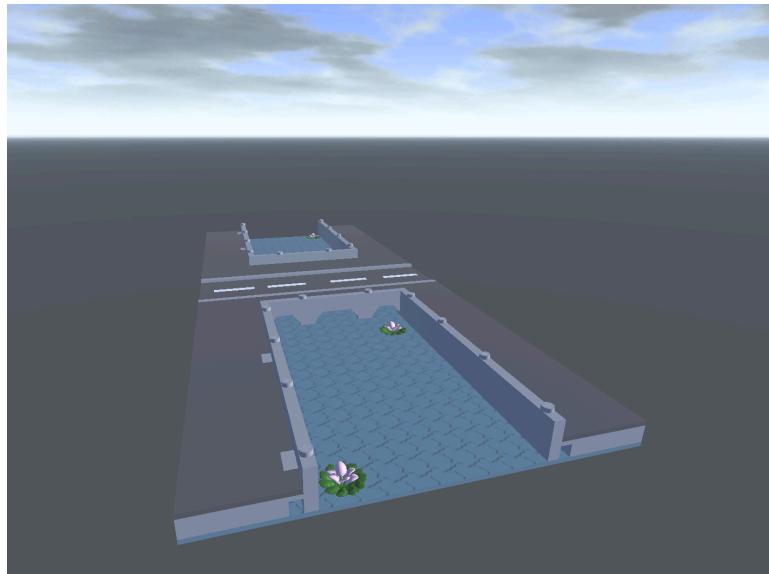
A preview of old glue surface type.

The smooth surface type doesn't have any special functionality, but it is useful for mimicking parts that don't have studs, such as tile plates in LEGO.



A LEGO street set, the parts without studs are referred to as tile plates.

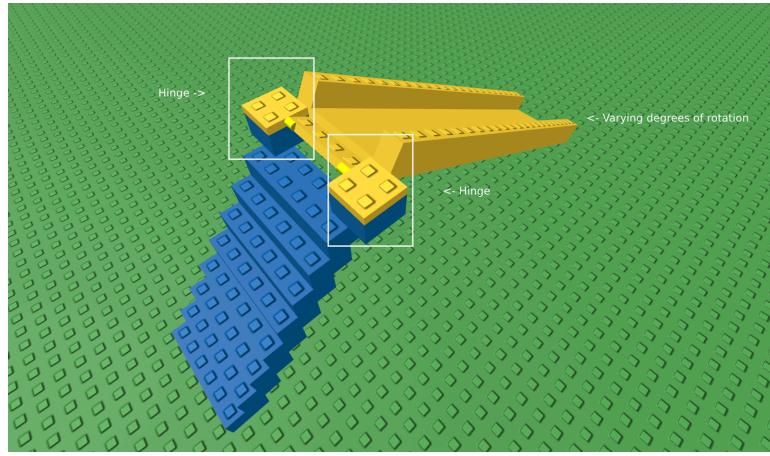
<https://rebrickable.com/mocs/MOC-149340/Hannas.BeverlyBricks/mils-street-32x32-crossing-the-canal/>



A conversion build.

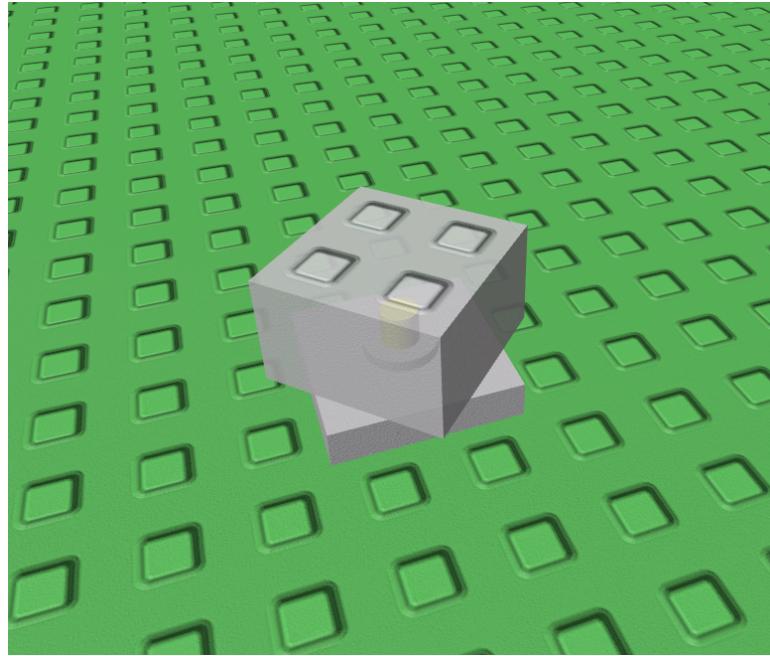
<https://www.roblox.com/games/95797689892431/Tile-Plates>

For hinge surface type, it allows for varying degrees of rotation by inserting a [Rotate](#) instance to establish the connection.



A demonstration of deprecated hinge surface type functionality.

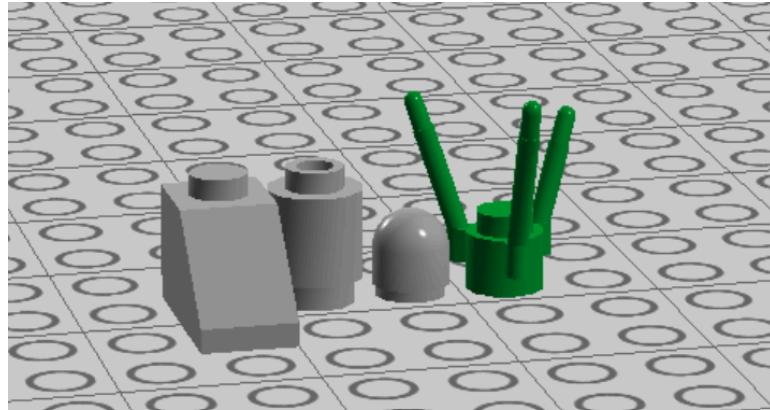
For motor surface type, it will make an unanchored part spin by inserting a [RotateV](#) instance to establish the connection.



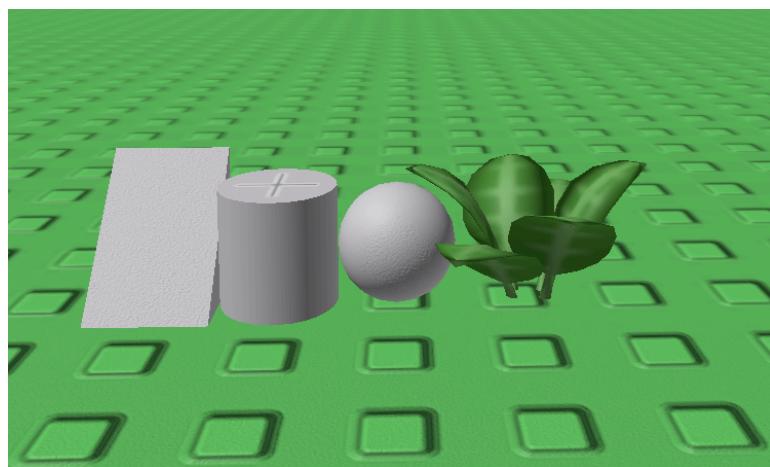
A demonstration of deprecated motor surface type functionality.

5. Part Types

Brick, Symmetry, and Plate parts can be wedges, cylinders, spheres, or contain a [MeshPart](#) (e.g., from a specific era, such as [2007 hats](#)) instance.

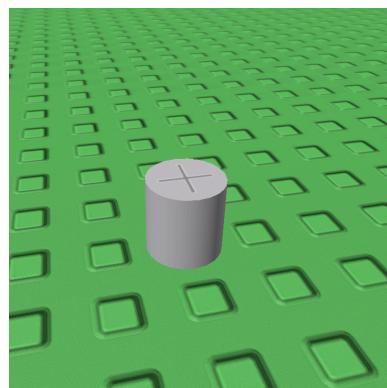


LEGO parts being wedges, cylinders, spheres, and having a MeshPart (referred by Roblox terminology).



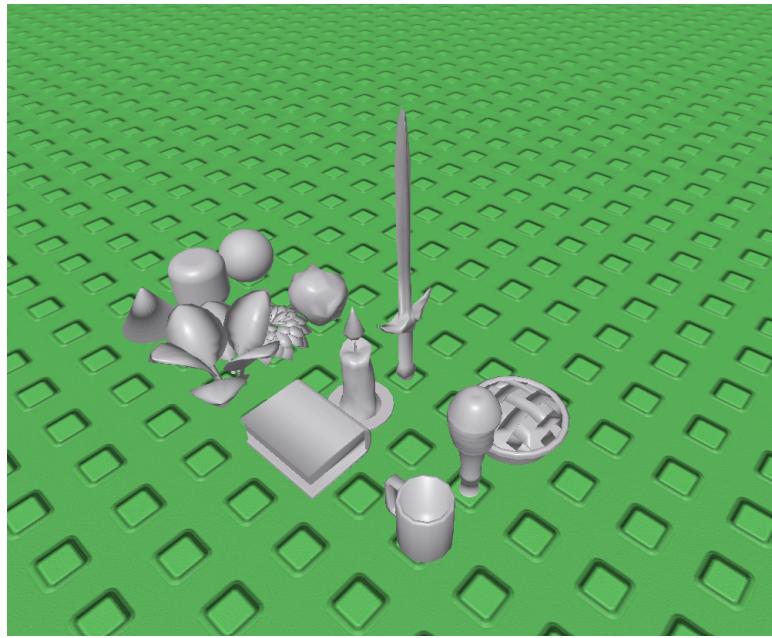
Roblox parts being wedges, cylinders, spheres, and having a MeshPart.

Another thing to note is that old Roblox had a "+" texture on cylinders, but it was removed later on.



A cylinder having a "+" sign on top of the surface.

More examples of parts having [MeshPart](#) instance for classic styled building.



Exterior > Terrain > Decoration > Food
<https://create.roblox.com/store/asset/108962247525754/Classic-Architects-Building-Kit>

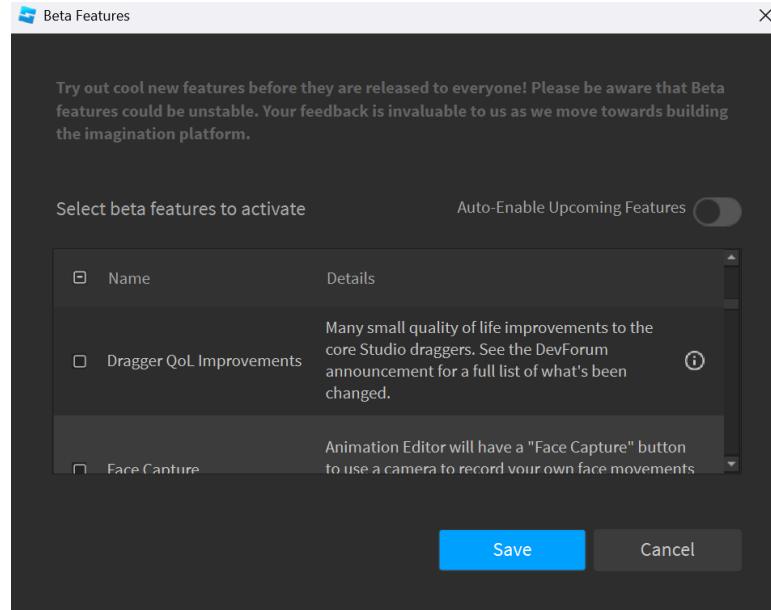
A showcase on how to alternate the LEGO accessory pieces.



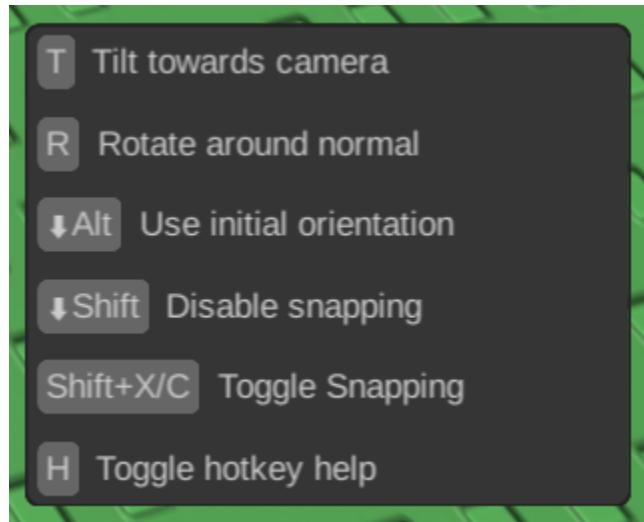
The left side shows a goblet and mug in LEGO, while the right side displays a part with a MeshPart instance being a goblet and mug in Roblox.

6. Alignment

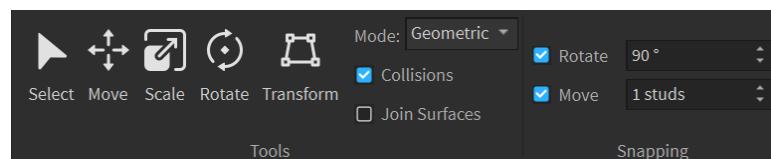
In File -> Beta Features, uncheck “Dragger QoL Improvements” and restart Roblox Studio.



When you uncheck the option, this GUI will no longer appear when using the Roblox Studio Dragger.



Configure the **Move** to 1 studs and the **Rotation** to 90 degrees with collision enabled. You only can use Roblox Studio Dragger, Select, Move, and Rotate (R for the rotation keybind) in jurisdiction with the [FormFactor plugin](#).



Examples of modeling furniture while following the alignment rule.



Chair > Table > TV > Couch > Bed > Bookshelf

<https://create.roblox.com/store/asset/106584200672697/Furniture-Set>

You can look at [Homestead Furniture Making Contest](#) models back from 2007 for inspiration.



Furniture modelled for Furniture Making Contest contest.

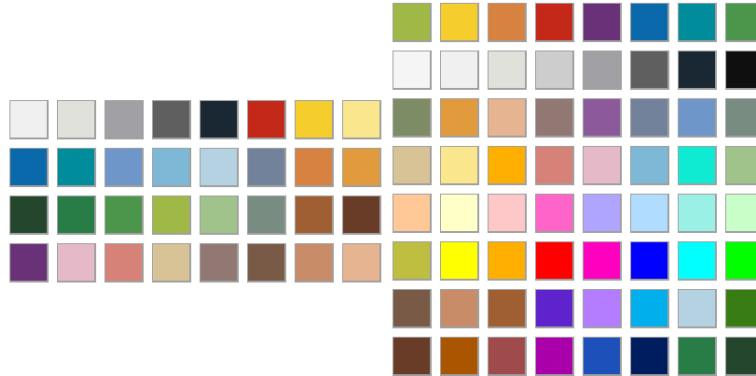
<https://create.roblox.com/store/asset/115590875255353/Classic-Furniture-Set>

7. Color Palette

In the early days, Roblox had a limited color palette for the GUI, initially consisting of only 32 colors (as referred to in the [LEGO Color List](#)). However, on April 2, 2009, the GUI was updated to include 32 additional colors that are not part of the LEGO color list. Those being: Institutional white, Mid gray, Really black, Really red, Neon orange, Alder, Dusty Rose, Olive, New Yeller, Really blue, Navy blue, Deep blue, Cyan, CGA brown, Magenta, Pink, Deep orange, Teal, Toothpaste, Lime green, Camo, Grime, Lavender, Pastel light blue, Pastel orange, Pastel violet, Pastel blue-green, Pastel green, Pastel yellow, Pastel brown, Royal purple, and Hot pink.



LEGO parts color palette.



The left side displays a limited color palette of 32 colors from Roblox's release, while the right side features 64 colors as of April 2, 2009 from GUI only.

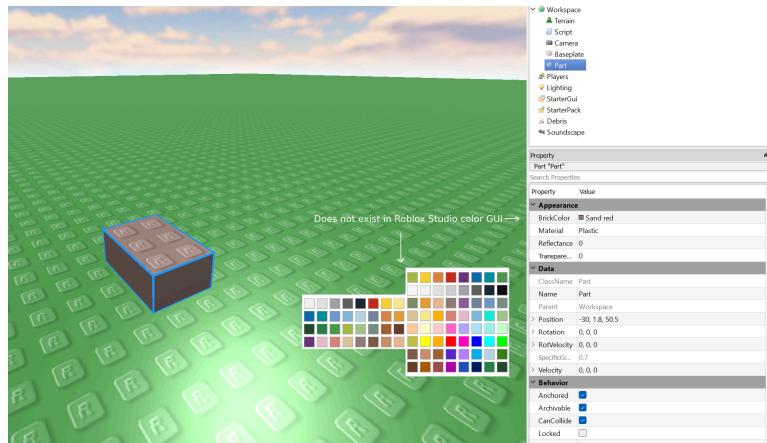
The plugin that restores the old colors GUI can be installed here:
<https://create.roblox.com/store/asset/13631376015/Classic-Colors-V2>

The full range of colors from [BrickColor](#) property was accessible through scripting (also refer to the [LEGO Color List](#)) though most builders overlooked this feature.

```
-- Initialize Part
local part = game.Workspace.Part

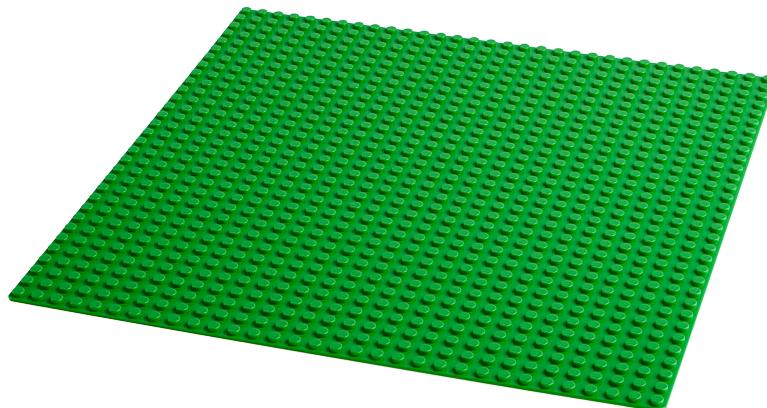
-- Change part's BrickColor to "Sand red", which doesn't exist in the Roblox Studio color GUI.
part.BrickColor = BrickColor.new("Sand red")
```

An example of scripting the part's BrickColor property.



A part's BrickColor property named "Sand red," which doesn't exist in the Roblox Studio color GUI in older versions.

A baseplate BrickColor would be "Bright green" plate part for starting places back in 2007, sized 512x0.4x512, reminiscent of LEGO baseplates.

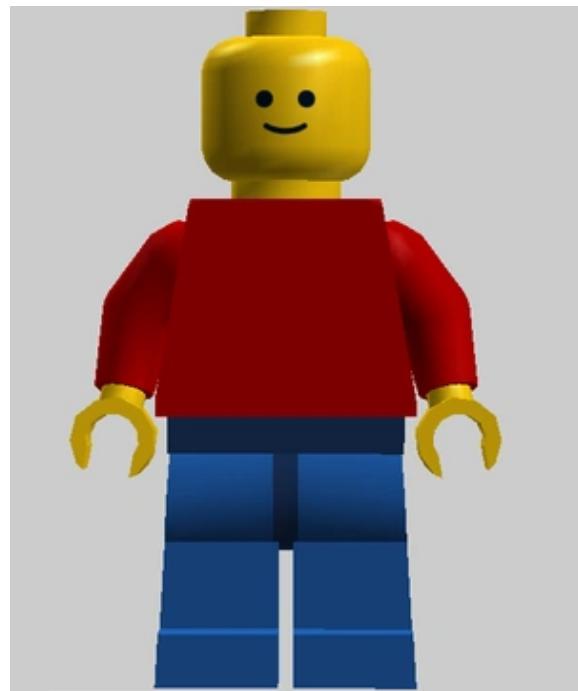


A 32x32 LEGO baseplate.



[Happy Home in Robloxa](#) built on a 512x0.4x512 baseplate.

If you're wondering why classic Roblox figures had yellow skin tones, it's because they were based on LEGO figures.



A LEGO figure.



Roblox players messing around in the [Homestead Furniture Making Contest](#) place.

8. Iteration

It's also important to try out new ideas and continuously iterate on your builds. Ask yourself whether this build needs to be changed or improved.

Here's a tree, it appears somewhat simple, but could it be made more appealing? Here's my attempt, it's up to **YOU** to decide whether something looks good or not. Observation and self criticism is key.



The left side shows a tree from Happy Home in Robloxa, while the right side displays an iteration attempt of it.

<https://create.roblox.com/store/asset/93188783950323/Pine-Tree>

9. Copying

Copying LEGO, Blockland, and old ROBLOX assets/places builds is what clicked for me.

However, the placement of your parts and the proportions will differ when copying LEGO sets, as you cannot replicate LEGO pieces like doors, windows, curves, etc., on a limited grid layout (studs) especially if you're prioritizing alignment rule in Roblox Studio. **Use a Roblox figure to ensure your build isn't too small for players, adjust part sizes, and add changes to the build.**

An example of checking the proportions using a Roblox figure. The part size below the humanoid has been adjusted.



The left side shows the number of studs highlighted in white, while the right side changes the part size with the Roblox figure.

Copying the window LEGO piece by changing the proportions and parts placement on the limited grid layout (studs) as we follow the alignment rule.



The left side shows a LEGO window piece, while the right side displays an attempt to recreate the window piece in Roblox Studio.

We also copy the door LEGO piece the same way. Let's add a sphere as a door knob for appeal.



The left side shows a LEGO door piece, while the right side displays an attempt to recreate the door piece in Roblox Studio.

The curved LEGO pieces are problematic too. We do the same process.



The left side shows a LEGO curved piece, while the right side displays an attempt to recreate the curve piece in Roblox Studio.

We can't replicate this unidentified LEGO piece, so we'll have to use a rotated part with weld surfaces that adhere to the "rule of cohesion." It looks better in appearance compared to the studs surface.



The left side shows a LEGO unidentified piece, while the right side displays an attempt to recreate the unidentified piece in Roblox Studio.

Since the proportions of the entire build have changed, we'll need to iterate on this section.



The left side shows a tiled plate staircase in LEGO, while the right side includes additional parts, and the parts size has been adjusted to fit the build proportions in Roblox Studio.

Same for this one. It needs iteration.



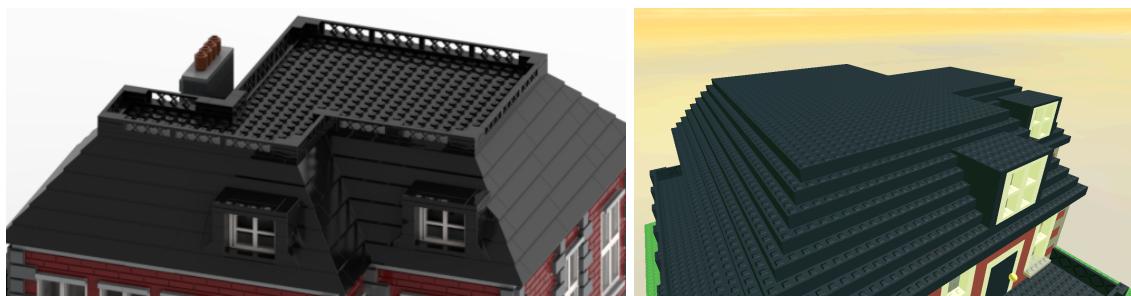
The left side shows the corner in the LEGO set, while the right side includes additional parts, and the parts size has been adjusted to fit the build proportions in Roblox Studio.

Let's get creative with the tile plate parts sticking to the wall.



The left side shows tile plate parts on the wall, while the right side displays an iteration attempt in Roblox Studio.

For the roof, let's just use a brick part.



The left side shows the roof of the LEGO set, while the right side displays an iteration attempt in Roblox Studio.

This is our result.



The left side shows the LEGO set, while the right side displays the copy attempt of the build in Roblox, with a few changes made to follow the rules for classic building.

<https://www.samscustombricks.net/product-page/lego-custom-moc-instructions-red-brick-house>

<https://www.roblox.com/games/130282281605456/Summer-House>

You can transfer the concepts into an original build project in Roblox, since you have an interpretation of LEGO building.



A work in progress showcase built for Classic Architects.

<https://www.roblox.com/games/92388687447075/Preserved-Home-in-Roblovia>

Game Examples:

<https://www.roblox.com/games/1578/Pirate-Ship>

<https://www.roblox.com/games/1609/Bastion-of-Horsey>

<https://www.roblox.com/games/17901/Bricklen-Manor>

<https://www.roblox.com/games/16332/Grenades-and-Oranges-Classic>

<https://www.roblox.com/games/18762/Robloxopolis>

<https://www.roblox.com/games/34713/Kingdom-Of-Argyll-Preview>
<https://www.roblox.com/games/47476/The-Abyss>
<https://www.roblox.com/games/48039/BrickBattle-Medieval-Mayhem>
<https://www.roblox.com/games/77537/ROBLOX-Police-Headquarters>
<https://www.roblox.com/games/113207/Rocket-Lagoon-Classic>
<https://www.roblox.com/games/121279/Night-of-the-Living-Dead-RSBC>
<https://www.roblox.com/games/1608864/Khranos>
<https://www.roblox.com/games/1608859/Aldacre-Version-3-0-000>

10. References

After understanding the concept of copying, for original build projects, if you're lacking a visual library or aren't sure how to build something, looking at references can help fill in the gaps. Some people can't imagine an apple in their mind.

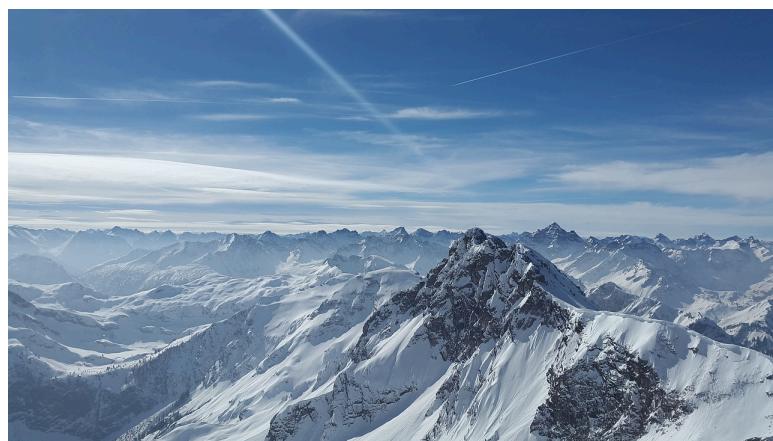


A picture of an apple.

More examples of references.



A picture of the 1904 World's Fair.



A picture of a snowy mountain.



A picture of modern furniture.

You could look at LEGO builds for inspiration while searching for references.



A picture of a LEGO Victorian London 1890's build.



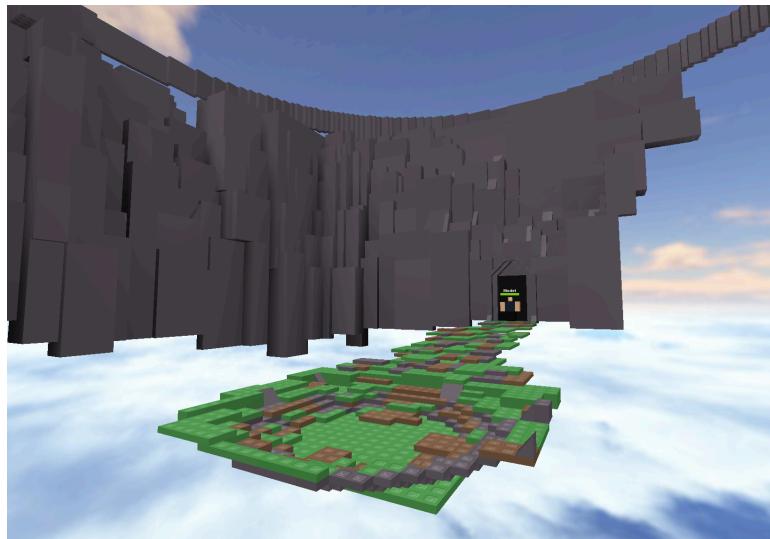
A picture of LEGO terrain.



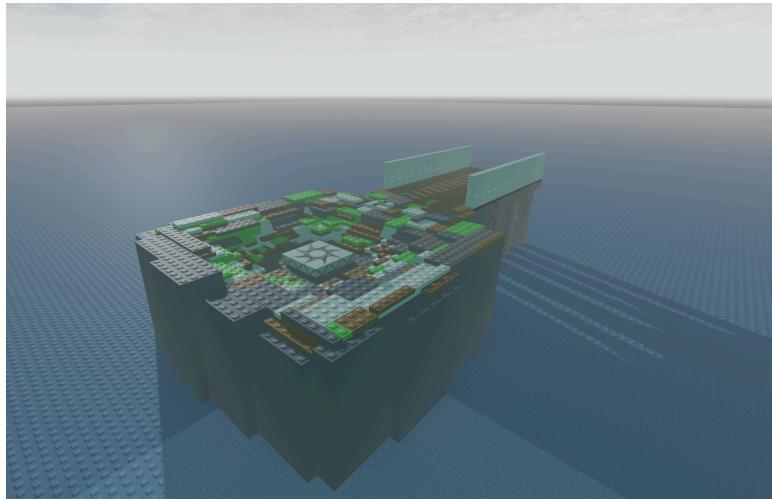
A picture of a LEGO furniture set.

Author Notes

Most of the concepts in this Google Doc are derived from legacy versions of Roblox Studio. If you're interested in learning more about classic styled building, you should experiment with legacy versions of Roblox Studio. You can download them [here](#).



A work-in-progress project I was working on on December 24, 2022 in legacy Roblox Studio version.



The final iteration of the work-in-progress build project in modern Roblox.

<https://www.roblox.com/games/77343381058313/The-Spawn>

This Google Doc is no longer being maintained as of 1/29/25, as I need to focus on personal matters. This guide requires a lot of time and effort to update, and some sections may be incomplete or missing information.

This guide was created by [FormFactorPlugin](#)