

# LineBuildTool

## Quick Start

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### 1. Create the BuildLine tool

Right-click on the Hierarchy view and select:

LineBuildTool > BuildLine

In the Hierarchy view, you then create a game object named Line\_Build, select the LineBuild object, and then edit it

HoleAsset: Side Hole resources, various different sizes of Hole resources are defined in the HoleAsset, you can right-click to create your own defined HoleAsset in the Project view, or you can select a HoleAsset for editing

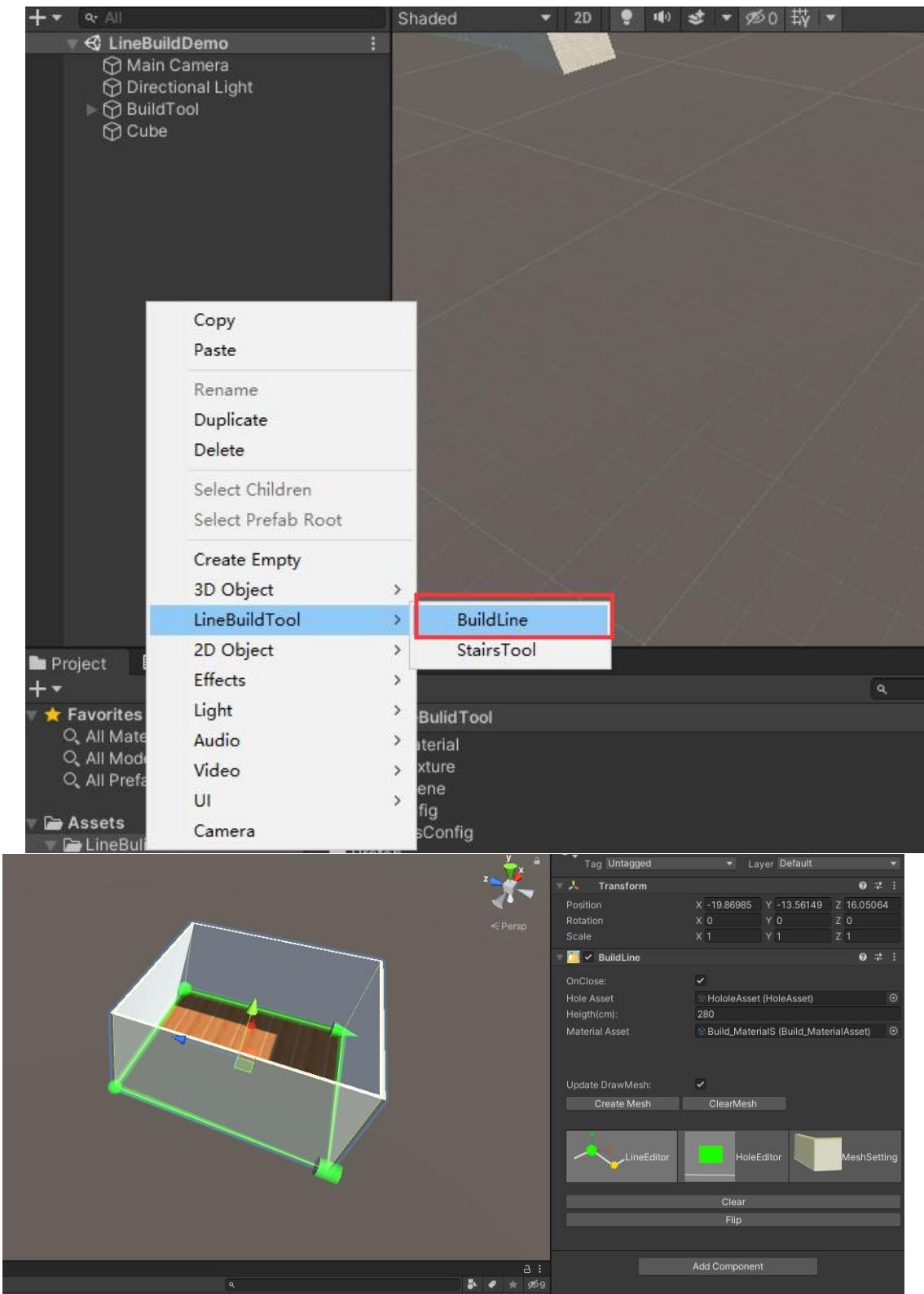
Height: Set the height of the side to affect the height of the generated Mesh

MaterialAsset: Sets the materials used to generate the Mesh

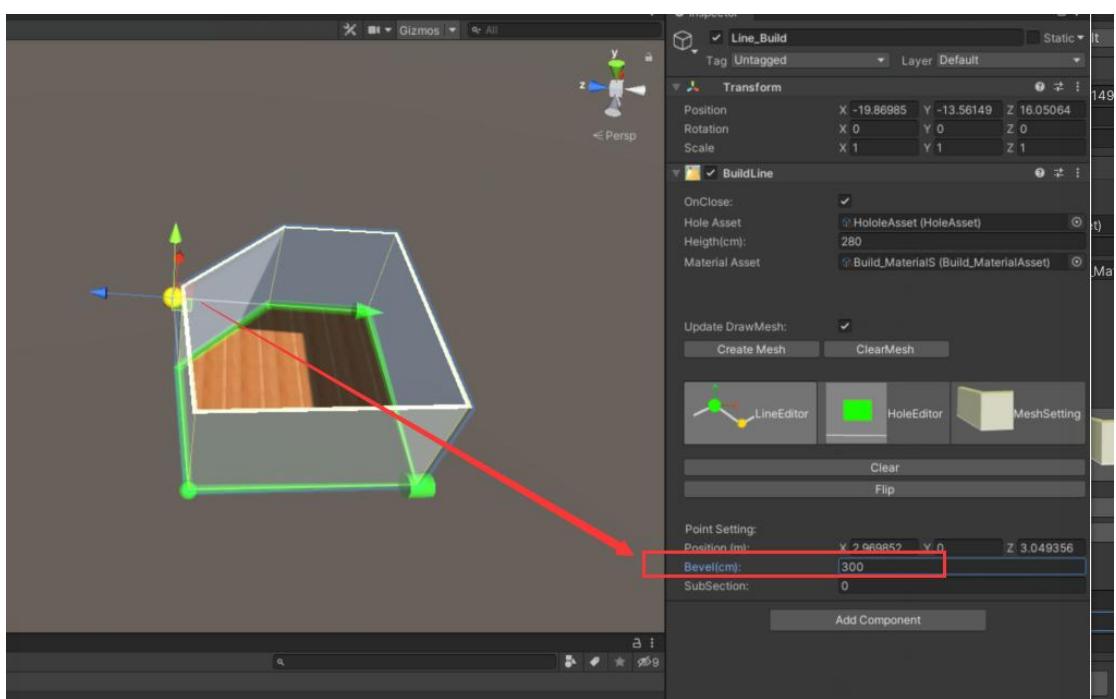
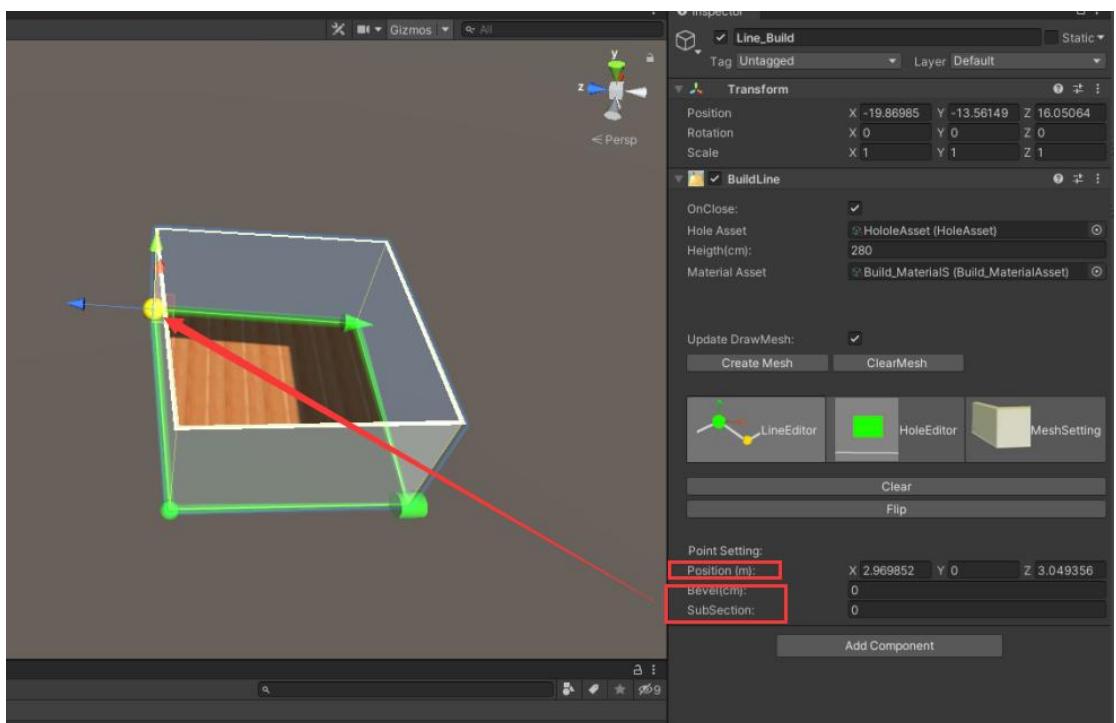
Update DrawMesh: switch automatically refresh Mesh

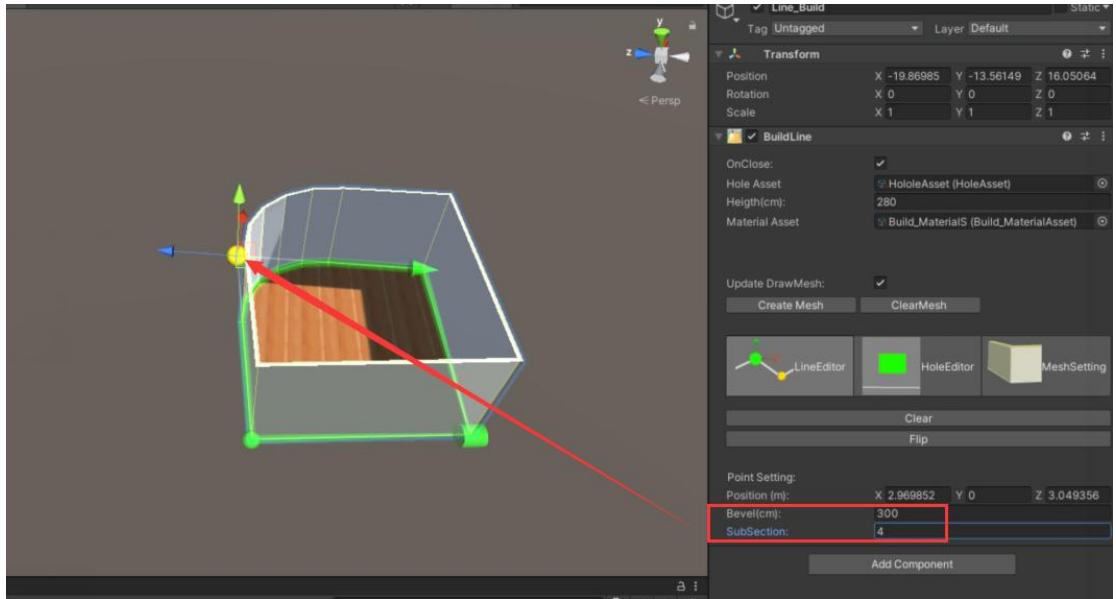
Create Mesh: Mesh drawing once manually

ClearMesh: Empty the currently drawn Mesh



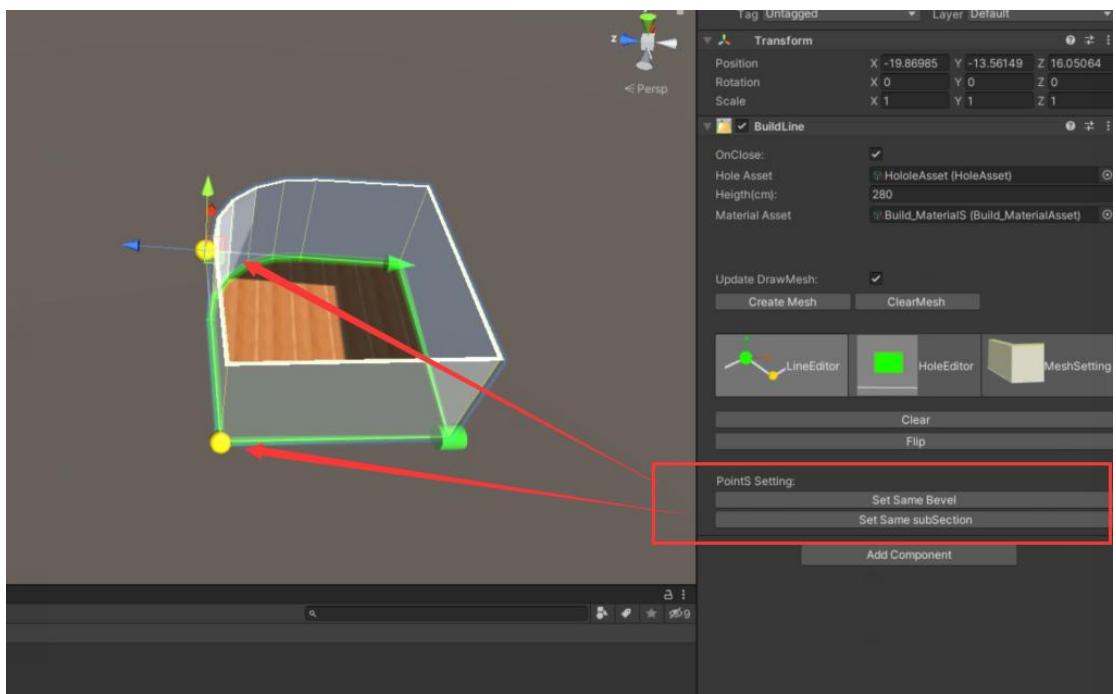
## 1.1 Using the BuildLine's LineEditor tool

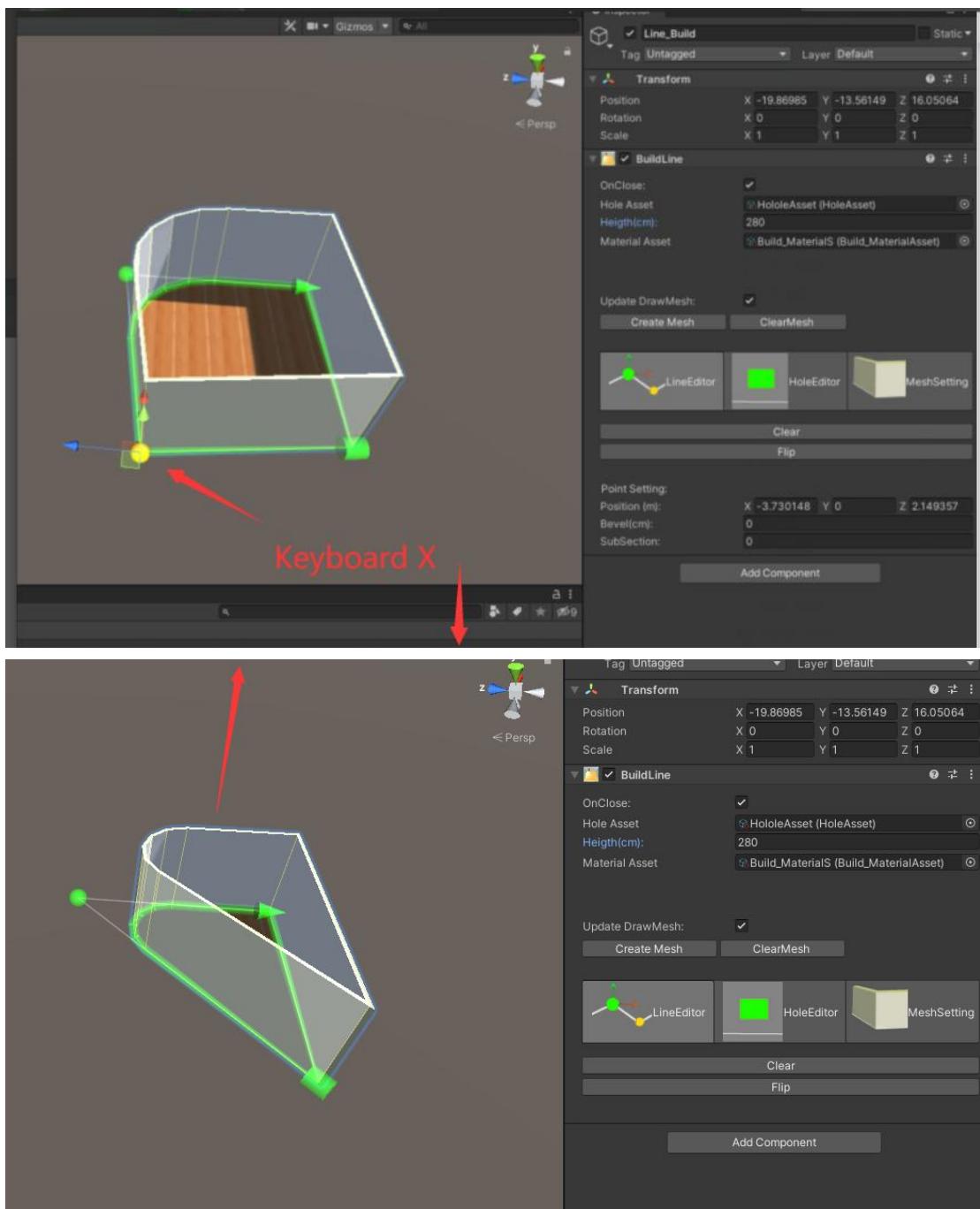




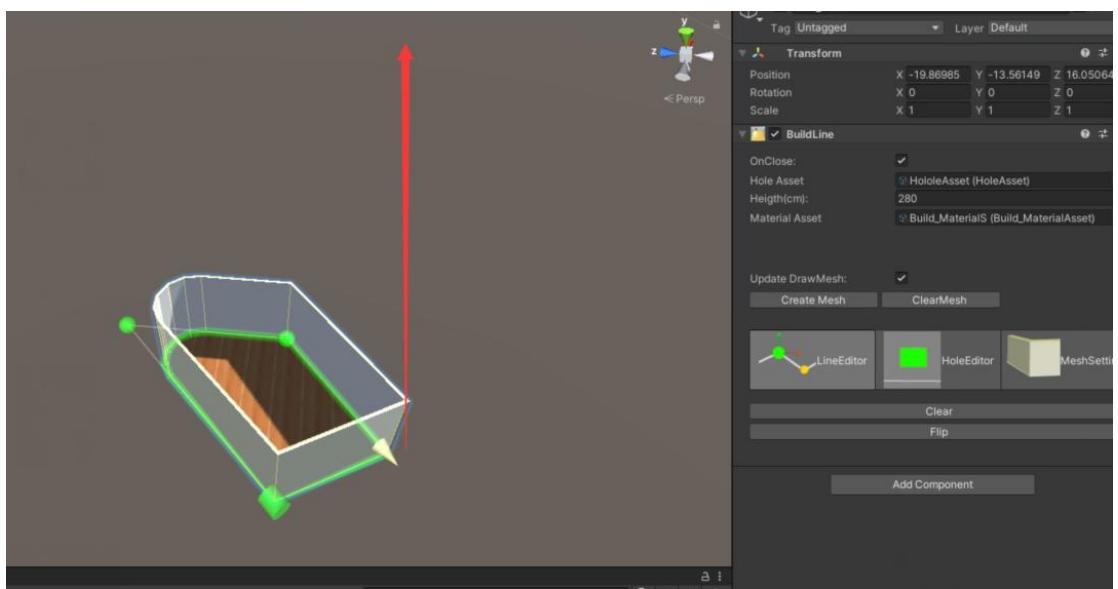
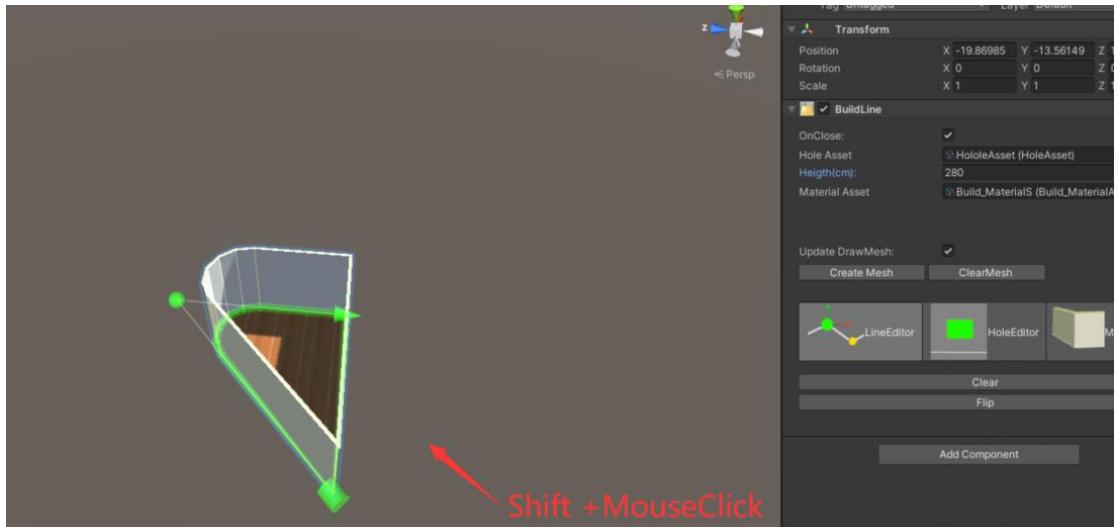
When you select different bevel or Subsections data for multiple points, the data on the Inspector version becomes a button, and then click the button to edit the data.

Delete the control point: Pressing the X key on the keyboard removes the selected control point



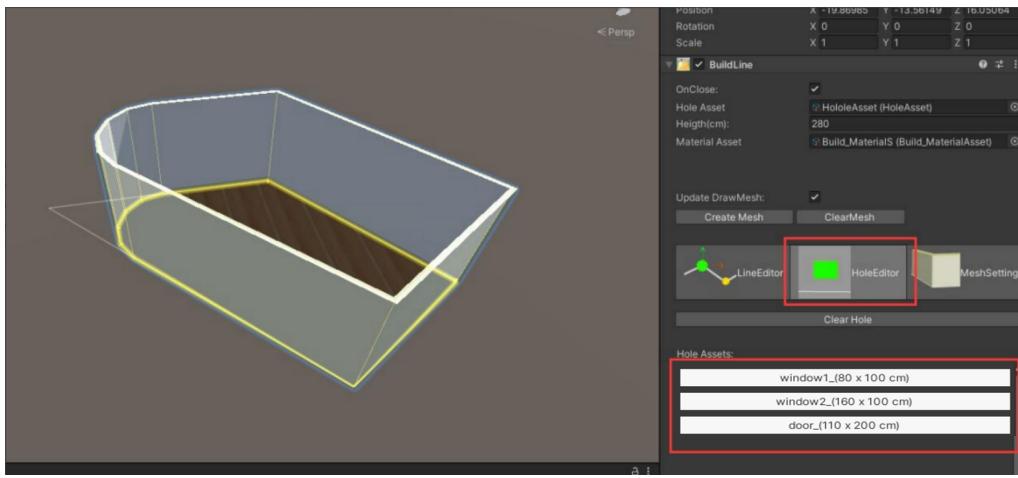


Create a new control point: offline Shift + left mouse button to create a new control point.

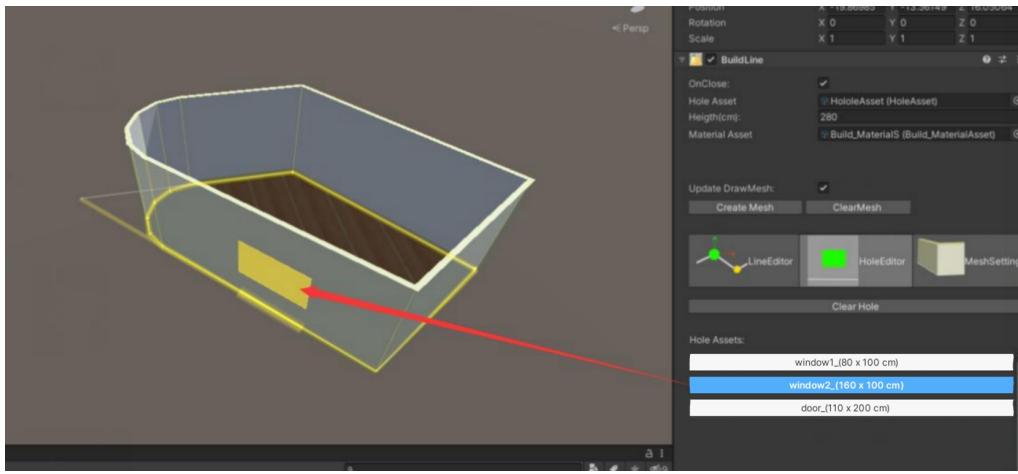


## 1.2 Using the BuildLine's HoleEditor tool:

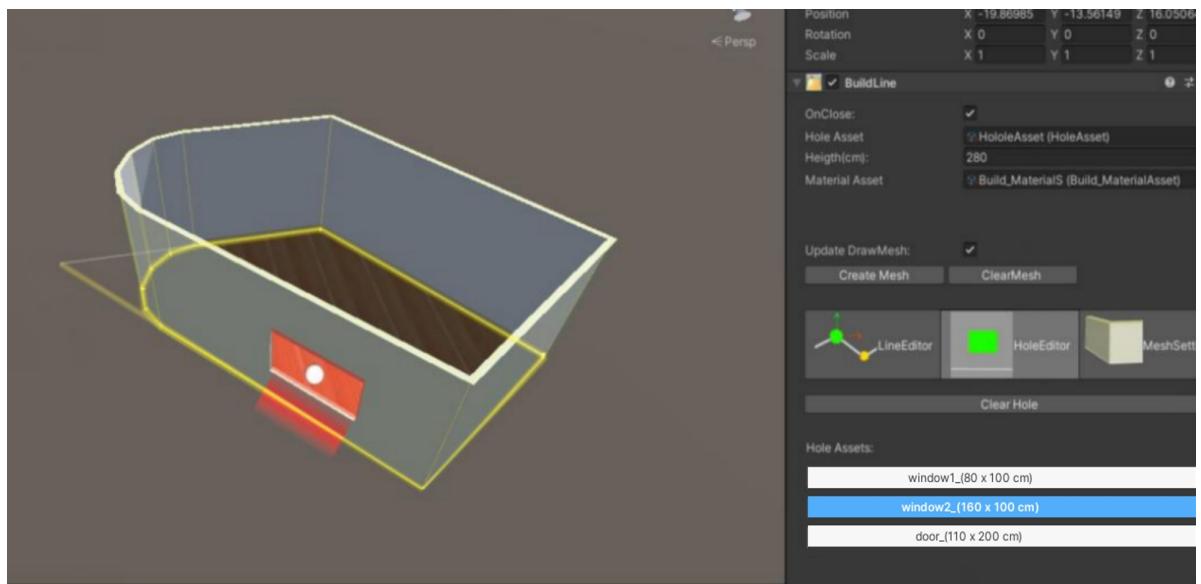
After HoleEditor is selected, HoleAsset resources will pop up under the Inspector version. Different opening data have different sizes and heights



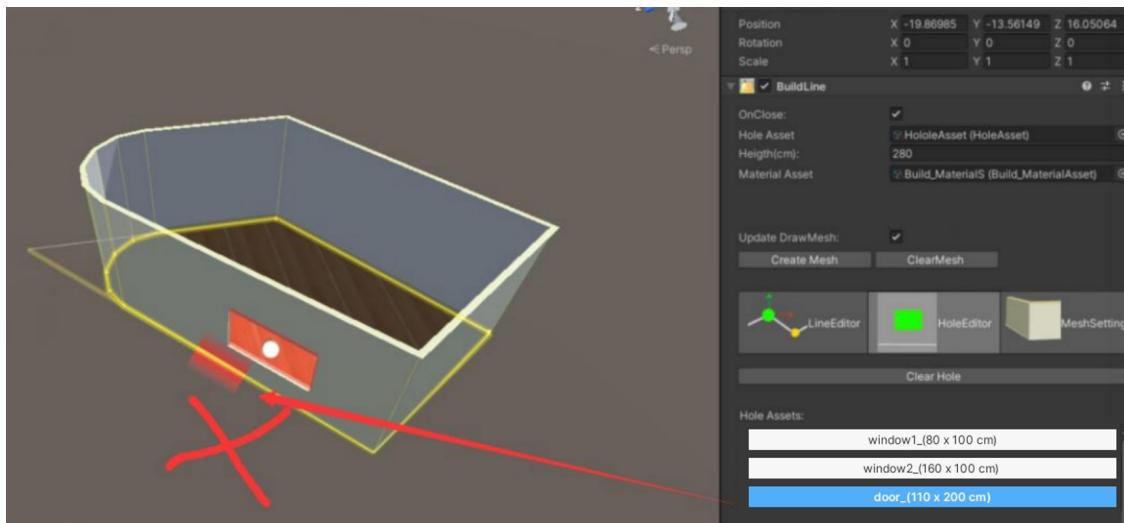
After selecting an opening data, hold down Shift to move the mouse pointer to the yellow line of the Scene view, and a yellow rectangle marks the position of the opening.



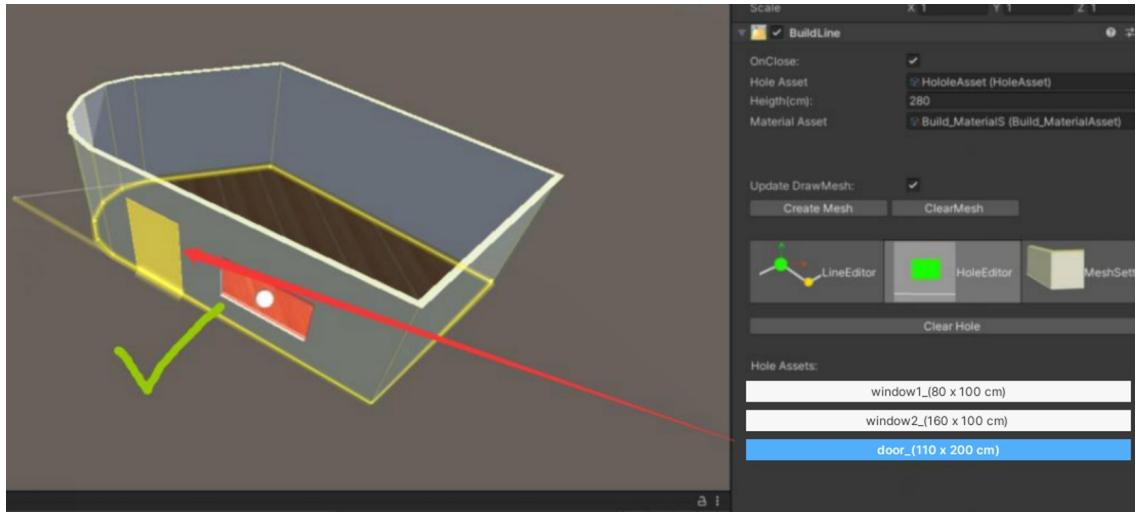
At this point, click the left mouse button to create a open hole.



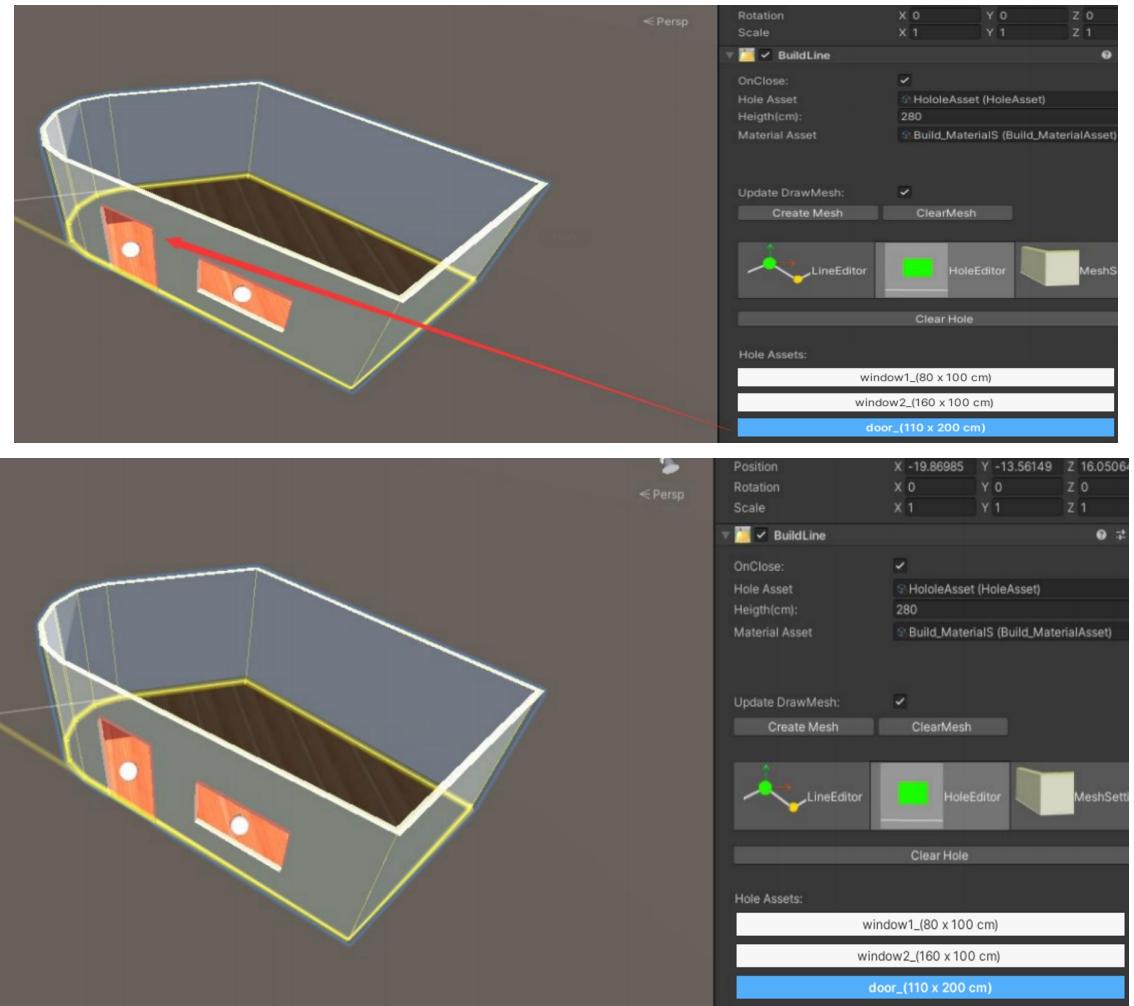
Select a new HoleAsset again and place it to the left of the previous opening



If the Scene view has a red thick line and no yellow rectangle mark, it indicates that other Hole resources occupy the current location, and a new Hole can only be created in other locations

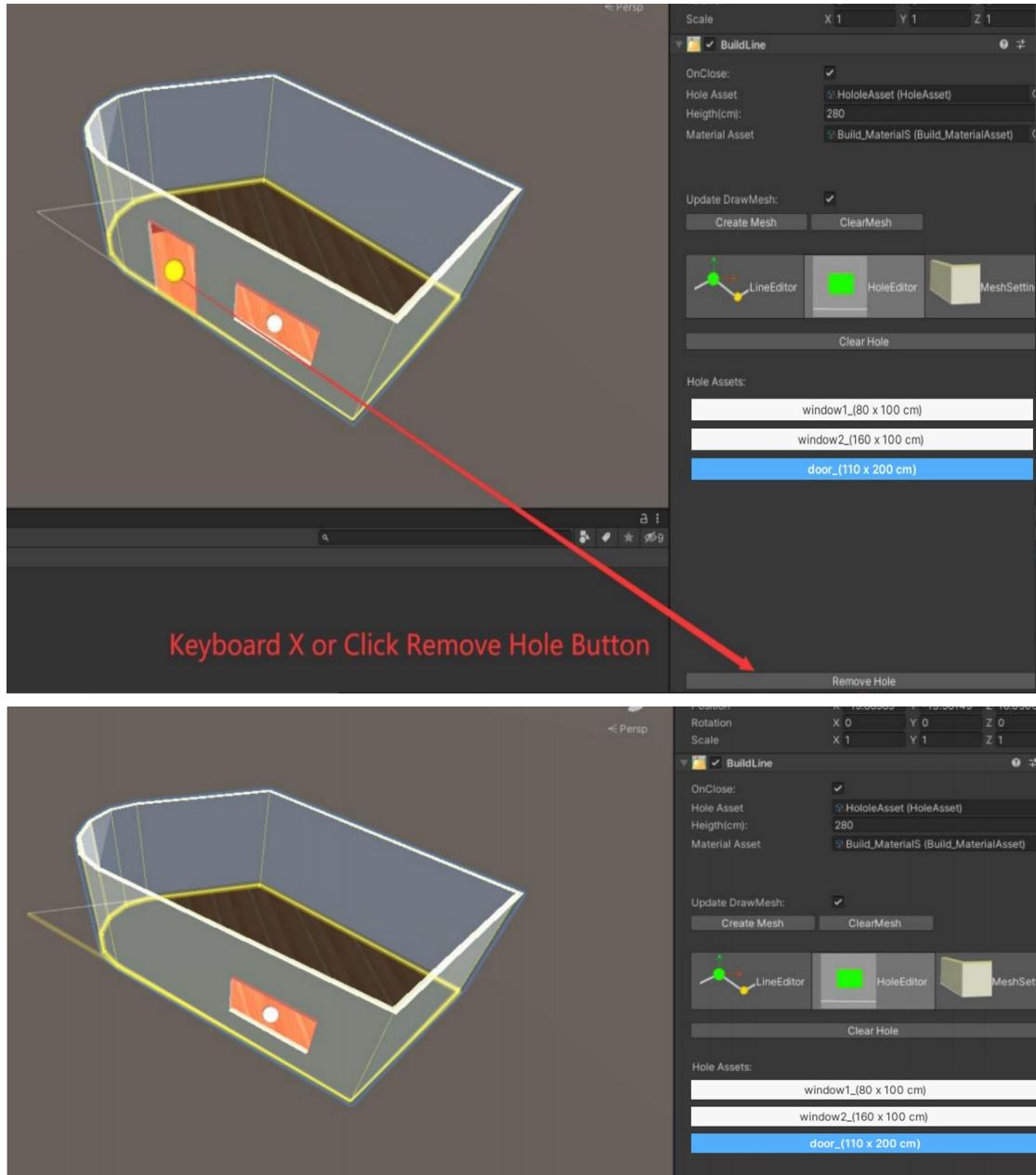


If the Scene view has a yellow rectangular mark, indicating that the current location can create a Hole resource, then click the left mouse button to create a new Hole on the side



Remove the side of the Hole:

Click the white sphere mark on the Hole tag. When the mark is larger and displays in yellow, it means that the change Hole is selected. Then, press the X of the keyboard or click the Remove Hole button of the Inspector version to delete the Hole



There is also a ClearHole button on the Inspector version, which removes all Hole

### 1.3 Using BuildLine's MeshSetting tool

The MeshSetting was used to modify the shape of the Mesh as defined by Line and Hole

**FilpDepthDir:** Flip the front and back directions of the side of the generated Mesh. The BuildLine tool cannot guarantee the front or back according to the direction of Line. The switch option can artificially switch the front and back

**ClampUV:** limiting Mesh's UV to 0 to 1 may help when you need to make maps in other software after exporting the model

**Smooth Mesh Normal:** Set a threshold value, when the clip angle of the face is less than this threshold value, the opposite normal line is smoothed (experimental function)

**Depth\_Cuver:** Define the front wall change curve along the height

**Back\_Depth\_Cuver:** Define the change curve of the back wall along the height direction

Depth: Deine wall thickness when 1 on Cuver

Draw BackMesh: Whether the switch draws the wall on the back

Draw DownMesh: Whether the switch draws the bottom wall

DrawUpMesh: Whether the switch draws the wall of the top surface

CoverData: Create a closed surface with the shape of Lien that can be used to realize the floor or ceiling data, you can have multiple data, click Add to add a new data, click Remove to delete a data

\_name: The name of this CoverData

\_DrawType: The method of drawing

Up\_Mesh: Draw only the top faces

Down\_Mesh: Draw only the underside

Up\_And\_Down\_Mesh: Draw both the top and bottom surfaces

Not Draw: None of them draw

\_Heighth: The height of the cover, and the underside is drawn in this position

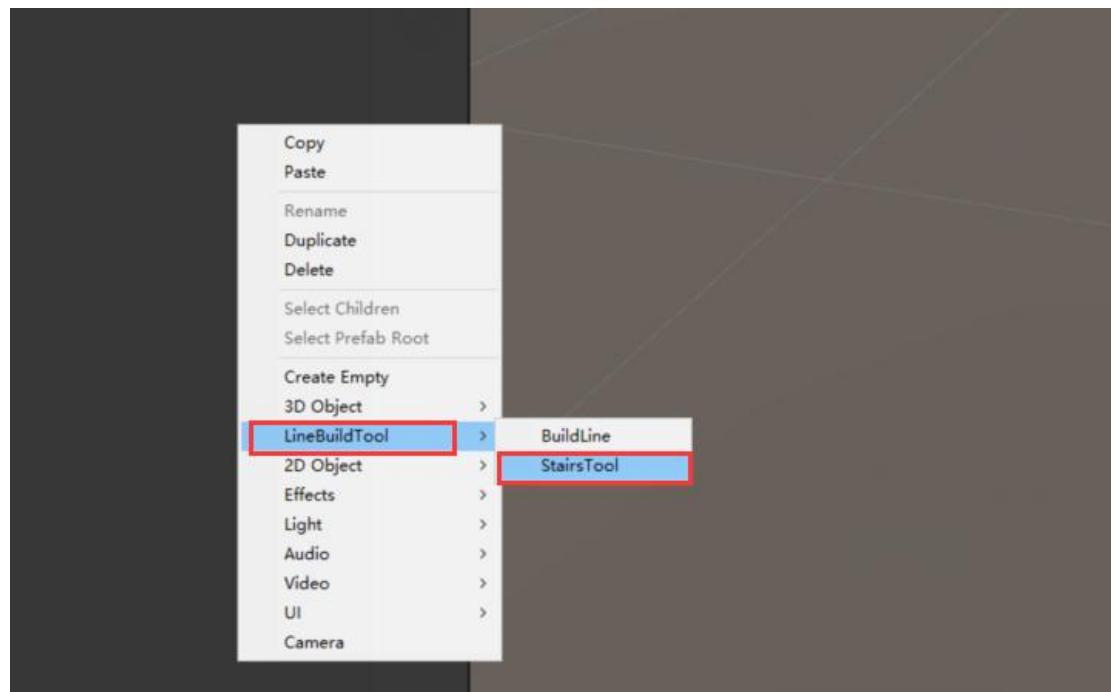
\_Depth: Depth of cover, drawing position of top face = \_Heighth + \_Depth

## 2. Create stairs using the StarsTool tool

Right-mouse button in the Hierarchy view

LineBuildTool>StairsTool

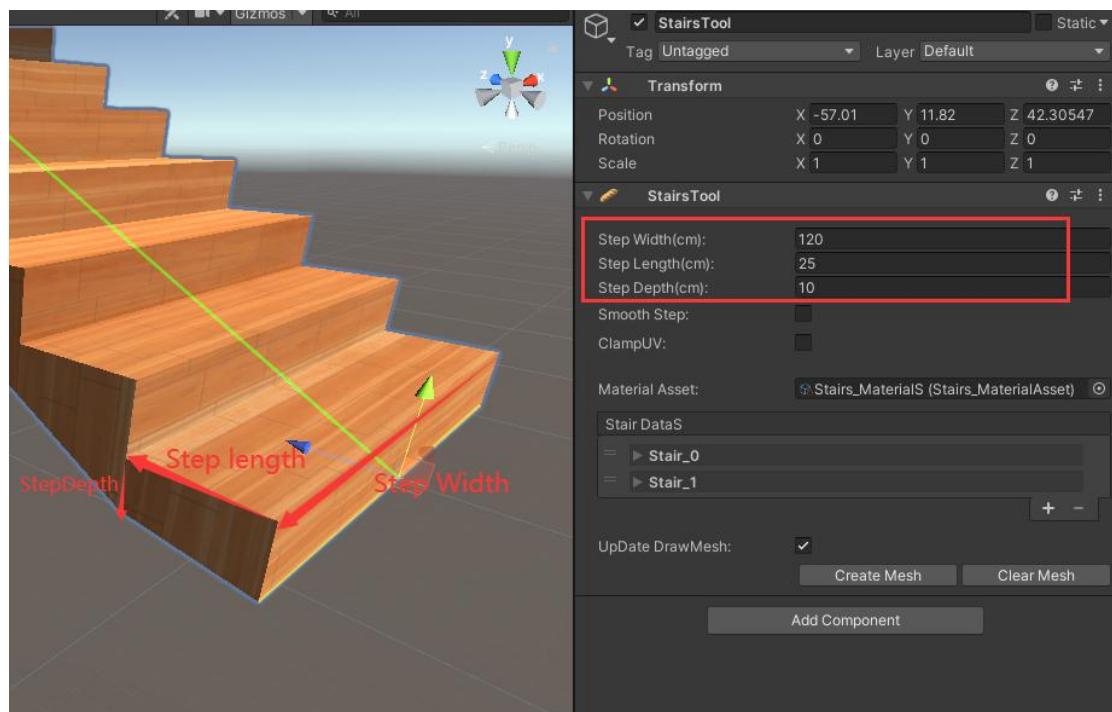
Create the StairsTool tool



Step Width: Width of the stair steps

Step Length: Length of the stair steps

Step Depth: Thickness of the stair steps



ClampUV: Limit the UV of the generated stair Mesh to the range of 0 to 1

Material Asset: Sets the materials used to generate the Mesh

Stair DataS: Data setting for each section of the staircase: the staircase can have many sections of each length, height, bending and connection corner can be configured, the beginning of the next staircase is connected to the end of the staircase.

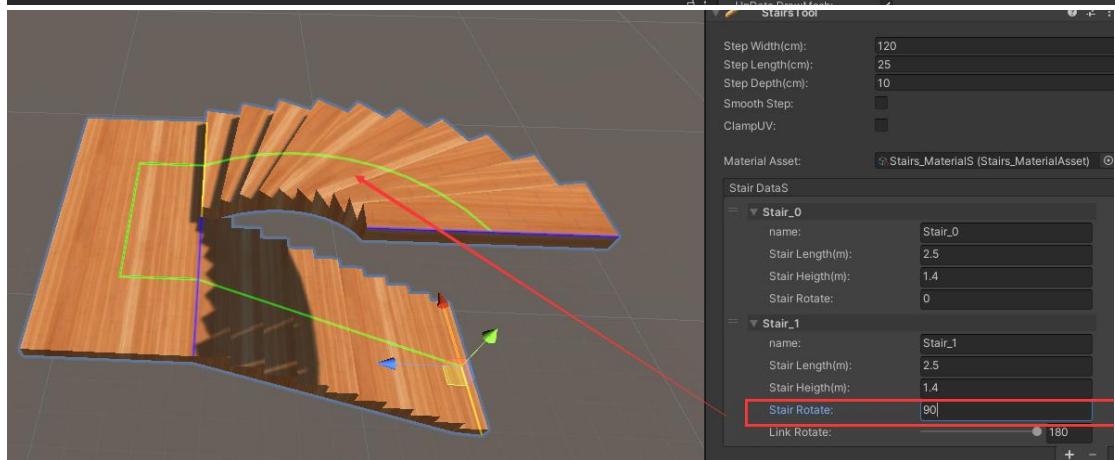
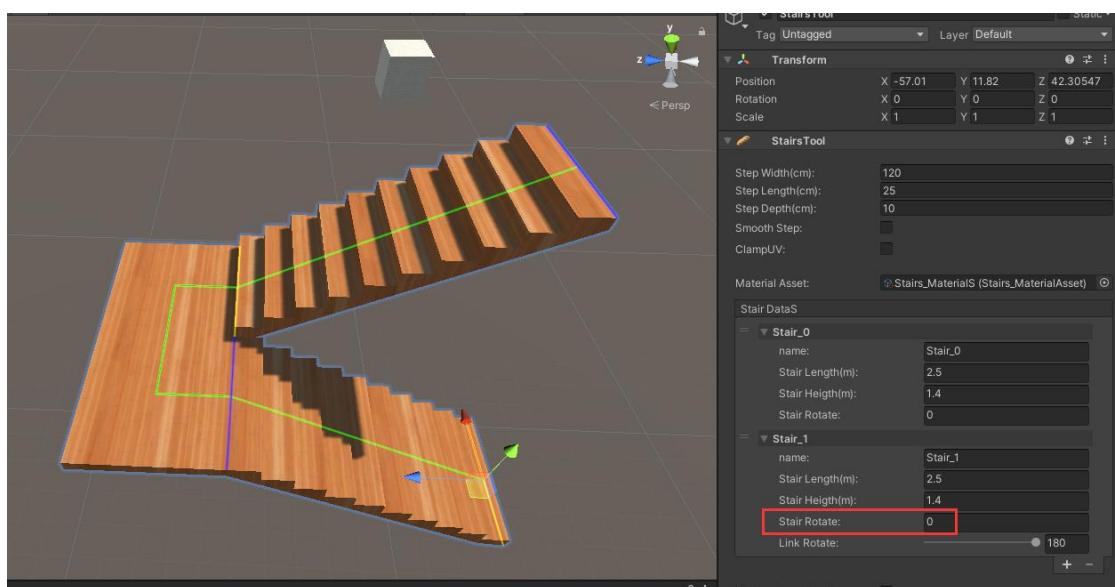
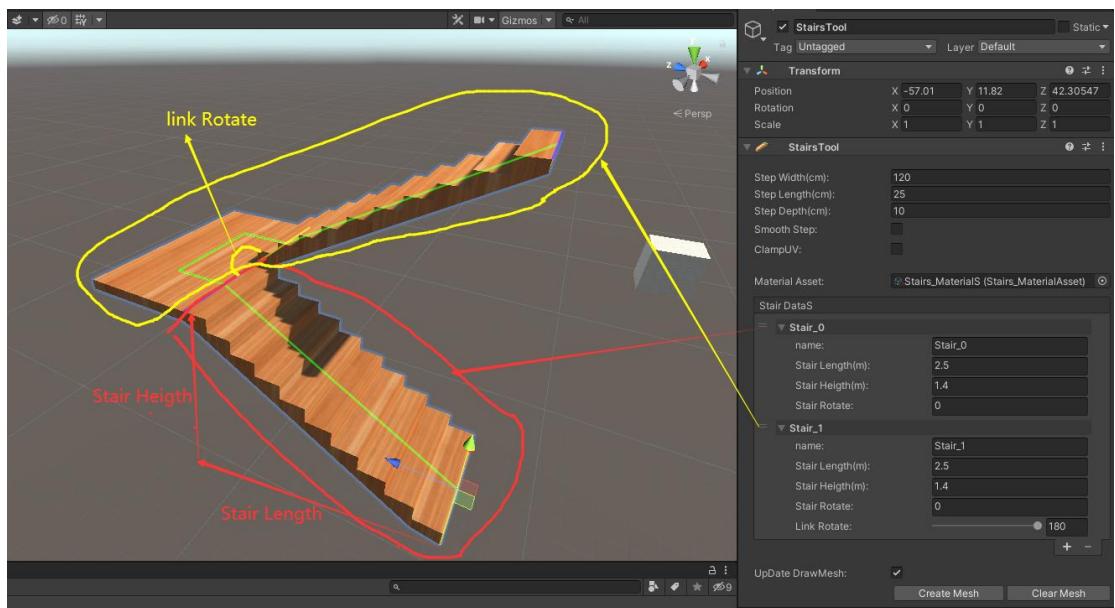
Name: The name of the staircase

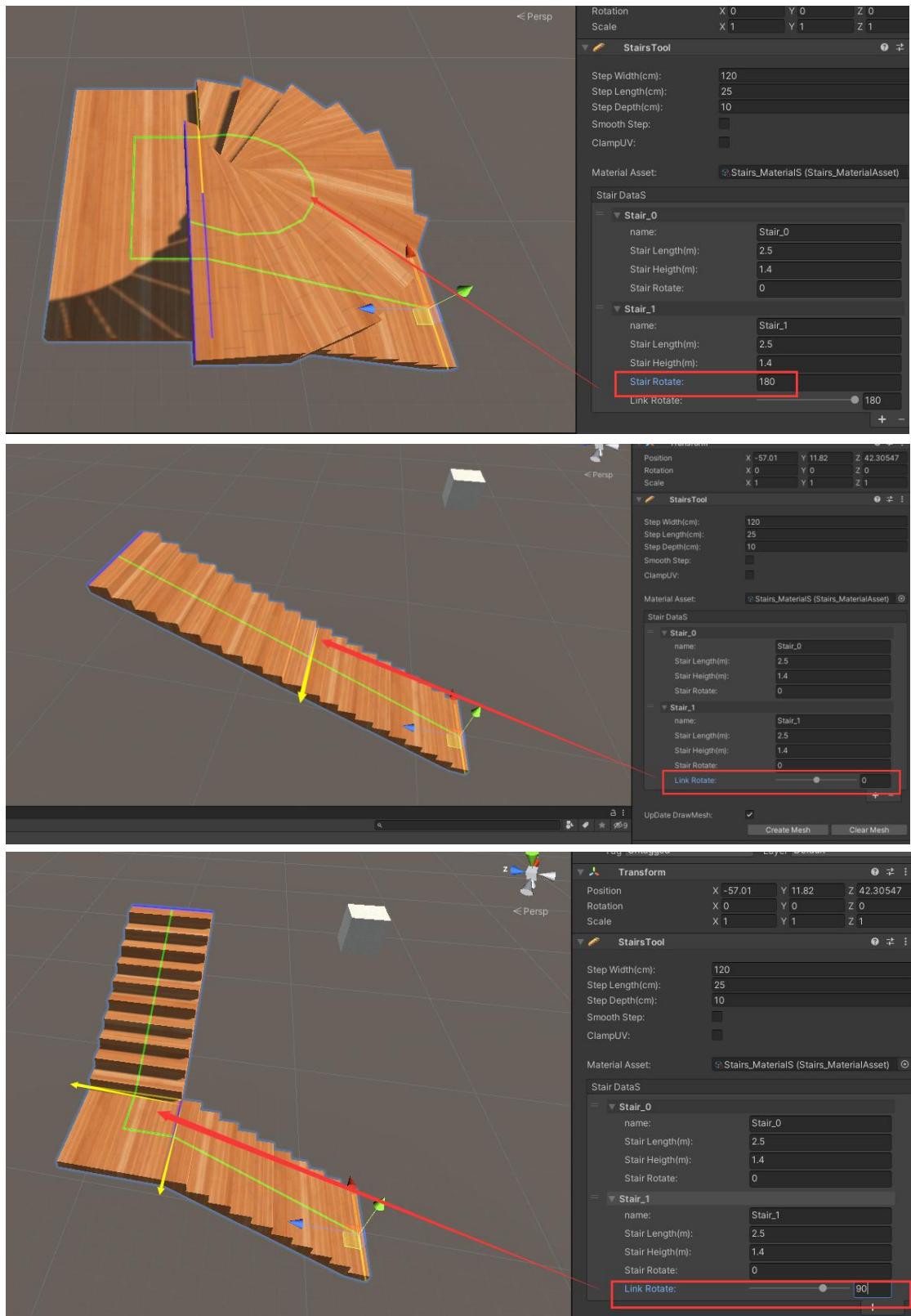
Stair Length: The length of the staircase

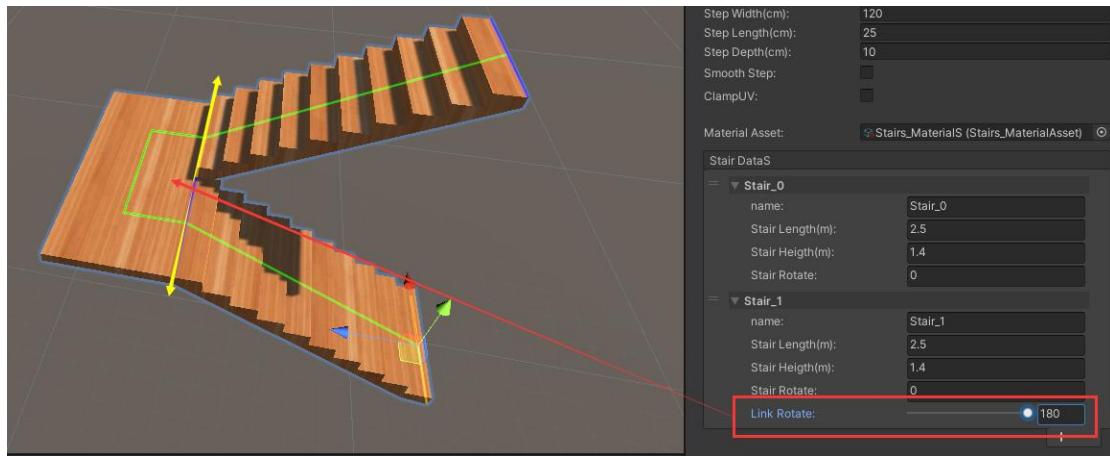
Stair Height: The height of this staircase, the positive number indicates the upward extension, and the negative number indicates the downward extension

Stair Rotate: The bend of the staircase

Link Rotate: Deflection of the connection from the upper stairs







UpDate DrawMesh: Whether the switch refreshes the Mesh data in real time

Create Mesh: Manually refresh the Mesh data once

Clera Mesh: Clear the previous Mesh data

### 3. Use the ChildLine tool:

The ChildLine must be a subobject of the StairsTool or the BuildLine, and the ChildLine is trimmed and offset from a ParentLine basis to generate a new piece of line segment data.

AnchorRange: Range of line segment cropping

Anchor OffSet: The value of the further offset based on the cropping range

Side OffSet: Side position offset value of the line segment

DrawMeshData: settings for segment generation Mesh

ClampUV: Limit the UV of the line segment to the range of 0 to 1

DrawSideType: Section drawn line drawing

None: Do not draw it

Rect: Draw the rectangle

Polygon: Draw the polygons

Rect Size: Draw the size of the rectangle

Side Point Count: Number of points for drawing a polygon

Side\_R: Draw the radius of the polygon

LineScaleCurve: Section zoom curve during line segment extension

MaxScale: Section zoom value when the LineScale Curve value is 1

Use StarCover: Close the Mesh from the interface start point

Use EndCover: Close the Mesh to the interface end point

Array Put: Place objects along the line section

Put Type: The interval mode of placing the objects

Fixed Spacing: Fixed the spacing between objects and place as much as possible

Fixed Count: Fixed the number of objects placed, and automatically process the spacing of objects according to the number

Item Spaced: The spacing of the placed objects

ItemCount: Number of placed objects

Put Offset: Position offset of the first placement point

ItemDataS: Objects settings to be placed

Warp: Handling of placement points beyond the scope of the line segment

UseMaxCount: Whether to enable the maximum placement quantity limit

Max Count: Stop placing when it reaches the maximum amount

OverridelItem: When the position overlaps with the position at the previous level

ItemObject: Objects to be put

### 3.1 Use ChildLine to create railings for StairsTool (default render line)

Create a subobject under StairsTool, click:

Add Component>LineBuildTool>ChildLine

Create a ChildLine component

Set up the SideOffset's:

X = -0.5

Y=0.7

Set the DrawSideType to be the Polygon

Set the PutType to be the Fixed Spacing

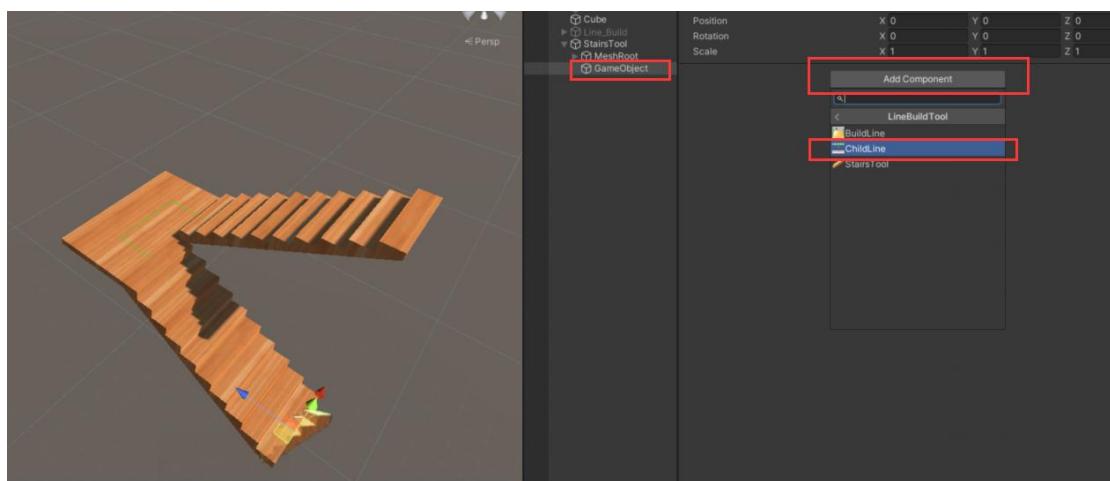
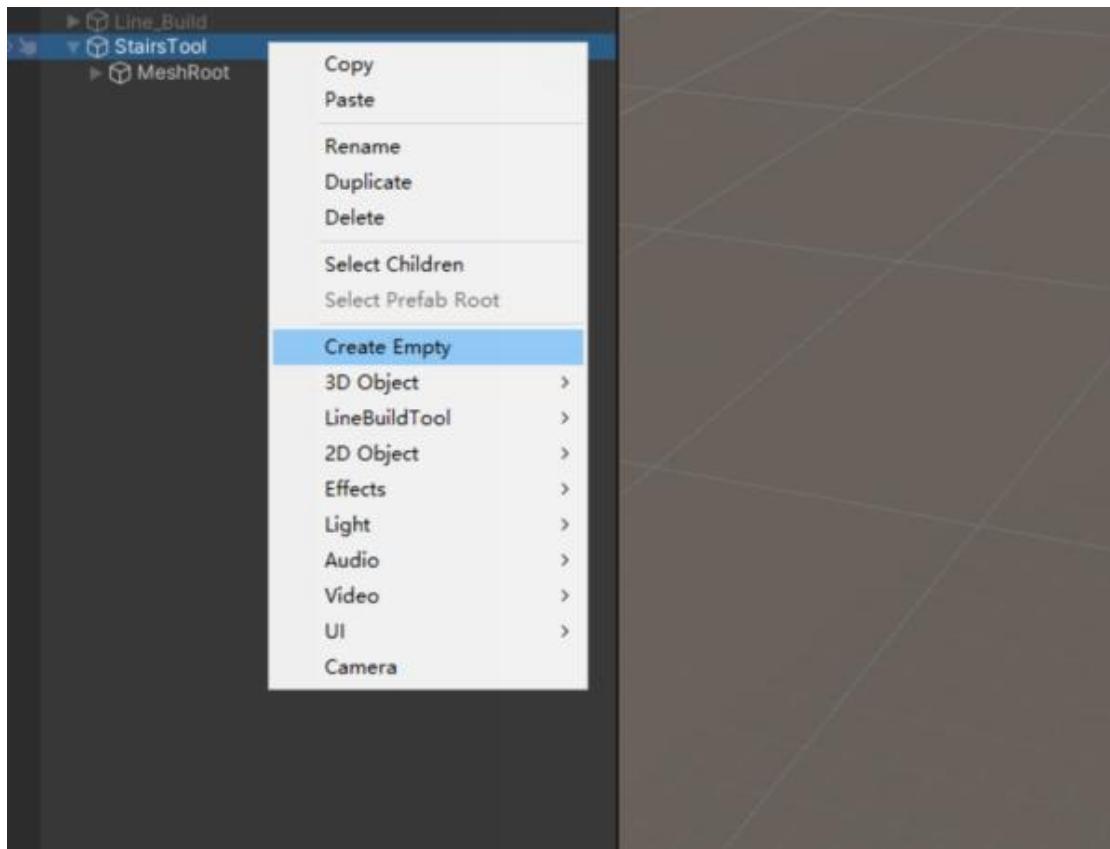
Item Spaced =0.2

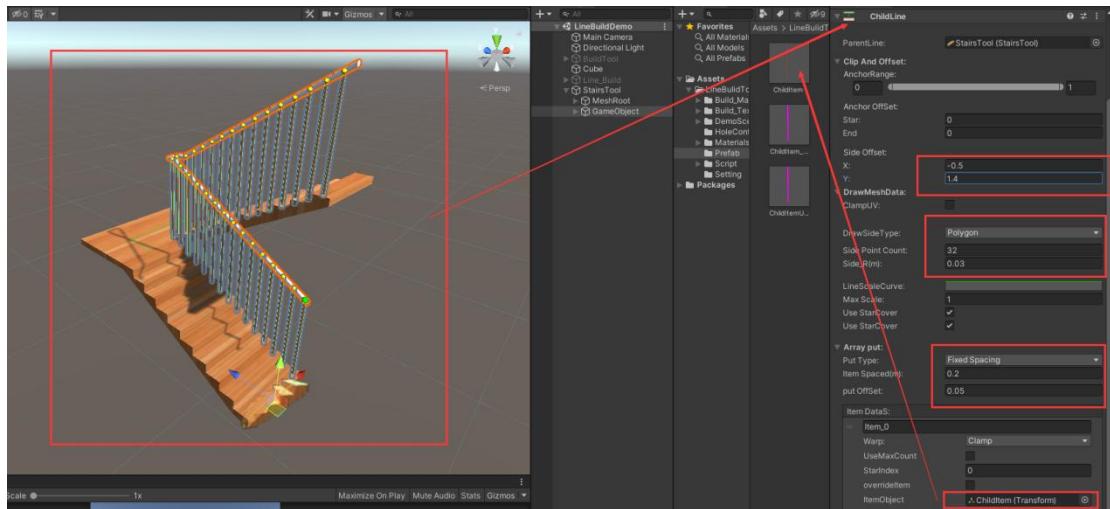
Put Offset =0.05

Press "+" to add level 1 data to the Item Data

Set the ItemObject s under the Project view:

LineBuildTool>Prefab>ChildItem





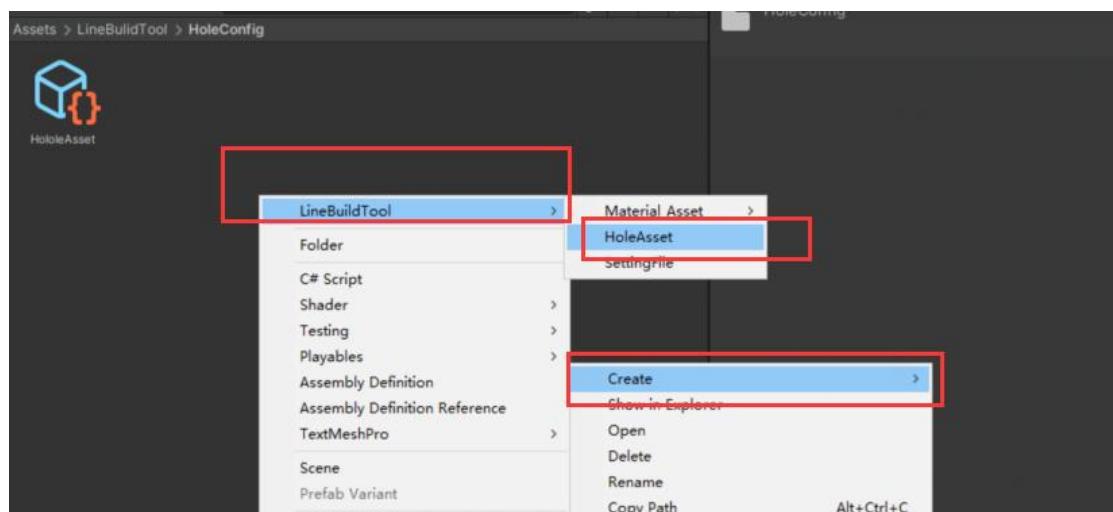
#### 4. Create a custom resource

##### 4.1 Create a HoleAsset:

In the Project view, right-click:

Create>LineBuildTool>HoleAsset

To create a custom HoleAsset

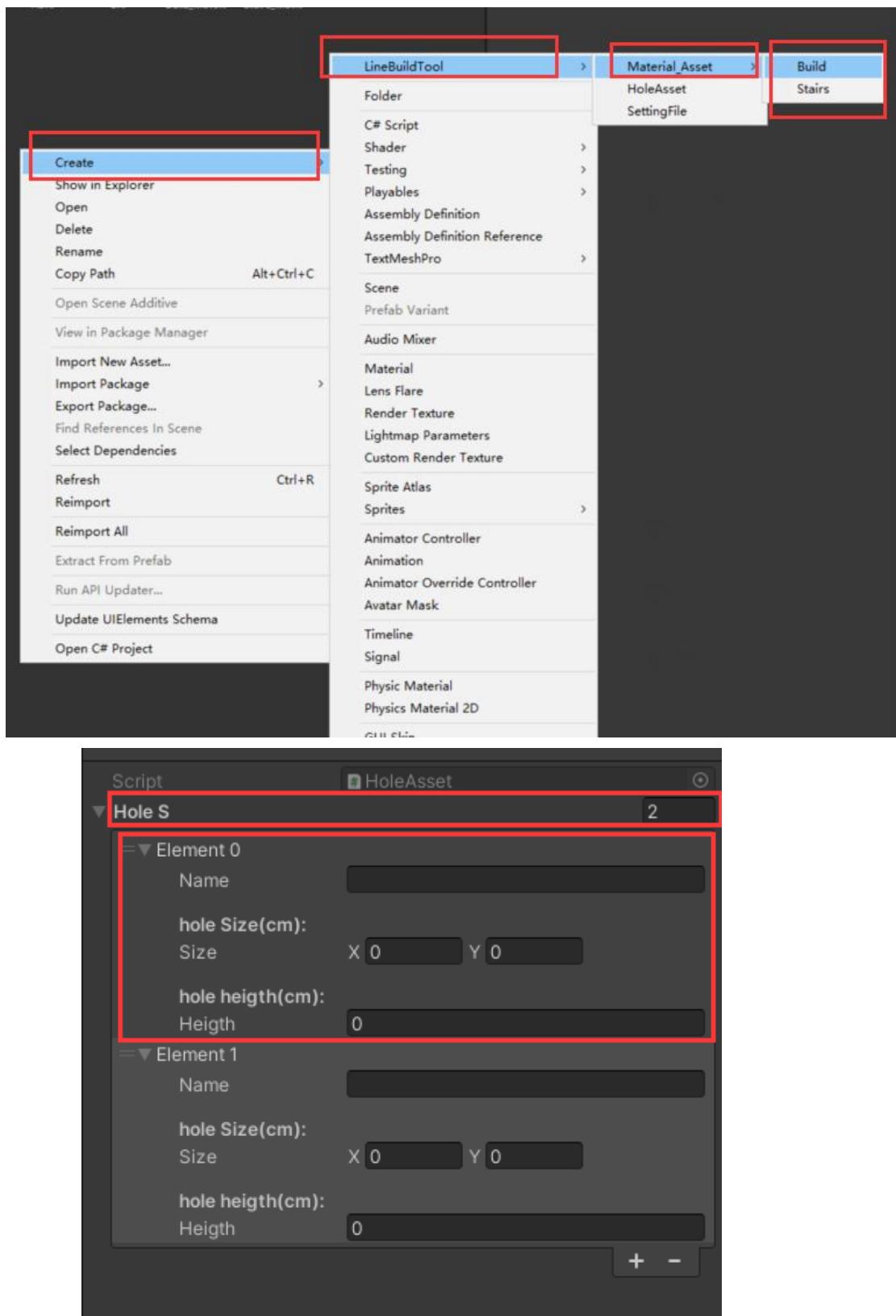


**Size:** The number of holeAsset's

**Name:** Hole's name

**Size:** Size of the Hole

**Height:** The placement height of the Hole



#### 4.2 Create a MaterialAsset s:

In the Project view, right-click:

Create> LineBuildTool> Material\_Asset> Build OR

Create>LineBuildTool>Material\_Asset>Stairs

You can set either the MaterialAsset of the BuileLine component or the MaterialAsset of the Stairs Tool

