

Energy Fence Builder

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To install: Place the EnergyFenceBuilder folder in the Assets folder of your project

To open: There should now be a Tools menu in the menu bar, after selecting it there should be an option for Energy Fence Builder, this will open the editor tool window. If either the Tool menu or the option of Energy Fence Builder is not there, restart the game engine. If the window is left floating it will close after adding a new fence to the scene; if it is docked it will remain open but focus will switch to the inspector window.

Understanding the tool: The first field on the tool window is a slider for the number of pylons to create your fence with, it is clamped to values between 2 – 40. It is possible to change this range by editing the source code.

The second field in the tool window is the location at which you want the center of the fence to be spawned. The pylons will be evenly spaced around this point in a circle. Underneath this field is a button which allows you to capture the position of a selected object in the scene.

The Fence Style menu lets you select which style fence you wish to create, including selecting your own prefab fence style. Instructions for creating your own style, and optionally adding it to the drop down menu to speed things up, are farther down in this document and in the source code comments.

Click the Add Fence button to build the fence in your scene, focus will now switch to the inspector for the new fence. Selecting the pylons in the EnergyFence script portion of the inspector window will highlight them in the hierarchy and scene, allowing you to place them where you want them. Make sure to keep them in order because this order is used to connect the energy beam and colliders between the points.

The pylon prefab field and beam material field are next, they should be set in the prefab before this point to maintain consistency, you probably do not want to edit these at this point.

The option for close loop determines whether or not to connect the last and first pylon.

The option for width multiplier affects the width of the collider added to the sides of the fence, depending on a custom style or the application within your project you may want to adjust this.

The checkbox next to Generate Fence will take all of these settings and build the energy beams and colliders between your pylons. If you move any component after generating the fence simply click this again, it will destroy the leftover components and build new ones in the correct new location. This also applies to after adding or removing pylons from the point list further up in this window.

To create a custom fence style:

- Make copies of the custom templates in /Resources
- Open the pylon prefab and add a model or particle system
- Create a new material for the energy beam (included materials use normals and custom shaders, but a basic material can work. Feel free to make copies of existing materials and play around with them)
- Open the fence prefab and
 - Assign the pylon prefab that was just made to the pylon prefab slot in the inspector
 - Assign the line material in inspector in energy the fence script and the
 - line renderer (line renderer should change based on setting in script when generate is clicked, but if not this is where to check)

A) Assign your fence prefab in the tool window after selecting custom style

OR

B) Add your style to the drop down menu in the editor window by following these steps:

- Open PrefabStore.cs and follow commented instructions to add your fence prefab to the list
- Open EnergyFenceByilder.cs and
 - Follow commented instructions to add the name of your fence style to the list on line 29
 - Follow commented instructions to add a case for your style to the switch statement (instructions and template on line 101)