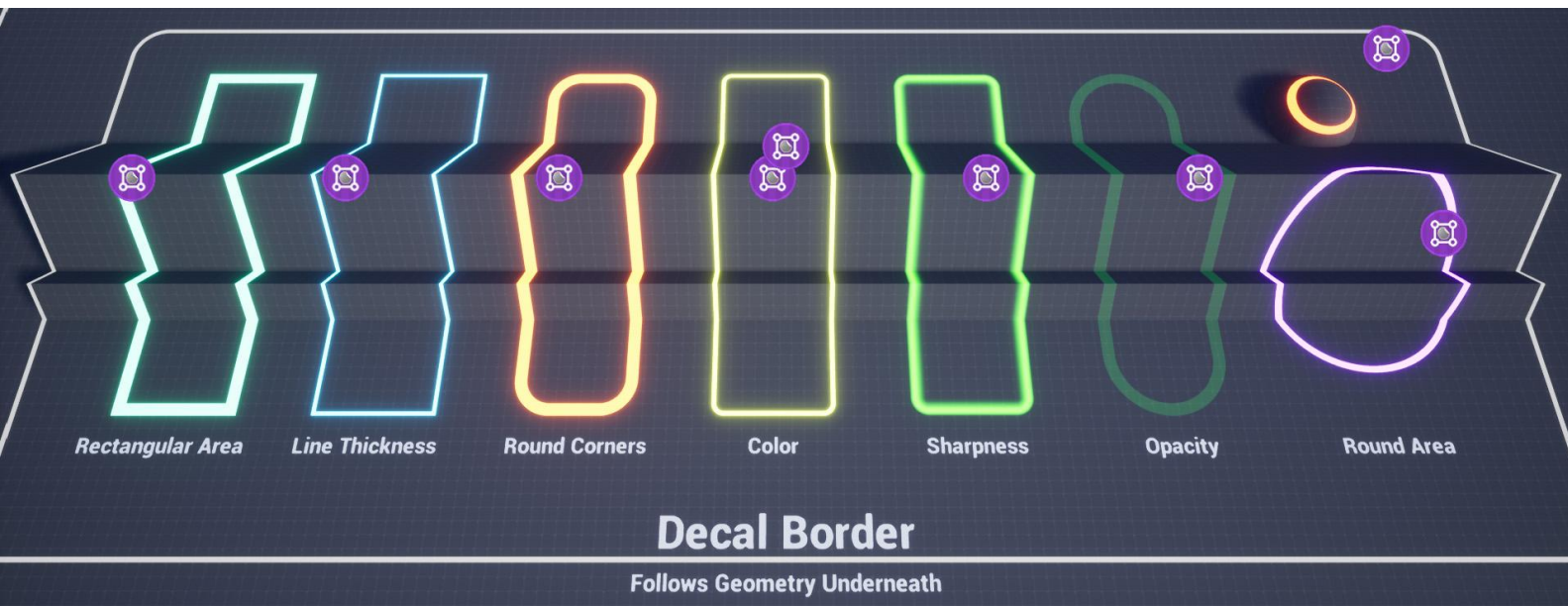


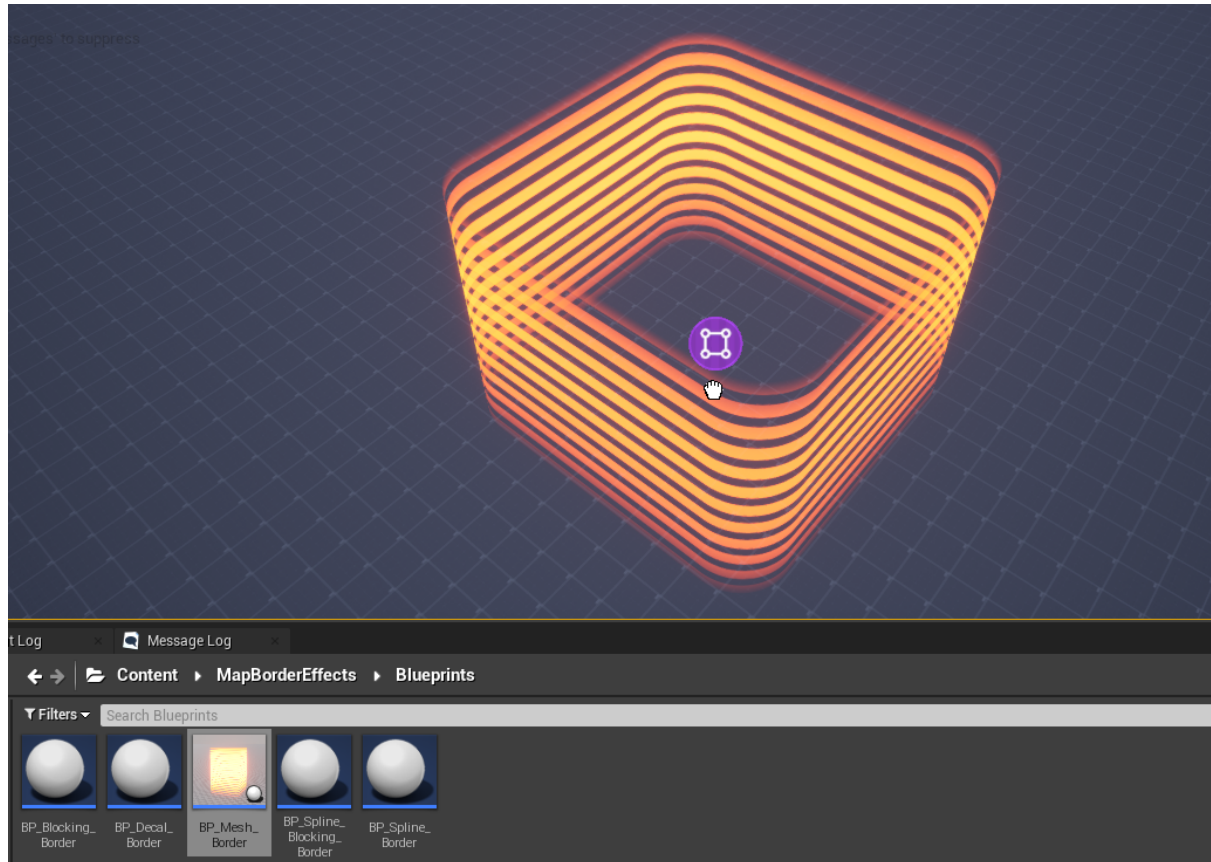


Map Border Collection

v1.0

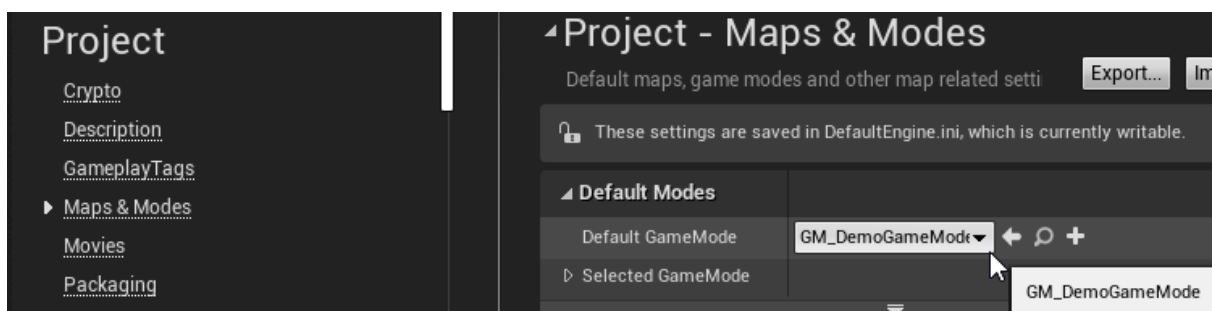
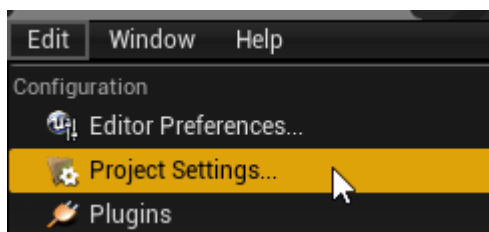
Getting Started

Just drag one of the borders into your scene.



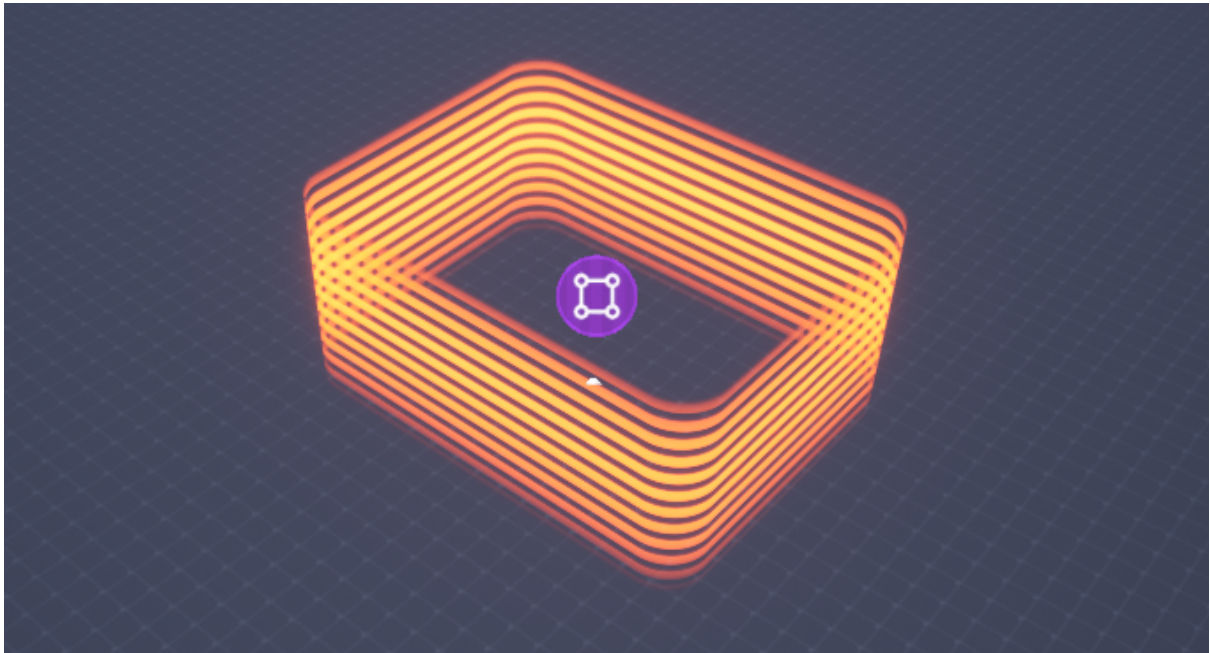
Examples

To make some of the examples in the Overview map work at runtime, open "Project Settings", go to "Maps & Modes" and in the Default GameMode parameter select GM_DemoGameMode



Border types

Mesh Border



Name: BP_Mesh_Border

Location: MapBorderCollection/Blueprints

Features:

- Rectangular or round vertical borders
- Allows you to change the main parameters at runtime
- Has a verification function to check if a point with (X,Y) coordinates falls inside an area. Corner rounding is taken into account during verification.
- By scaling it you can quickly change the size and height of the borders
- Can be used with [Fake Fog material](#)

Settings

All settings can be found in the "Details" panel -> "Settings" tab when selecting a border

Border Size

Size of the area

If the **Round Area** mode is enabled, X value is used for its size

Border Material

Material that will be applied to the border

Corner Roundness

The strength of corner rounding

Border Height

The height of the border

Round Area

Makes the area round

Rounded Corners

Enables corner rounding

Enable Top Plane

Enables the top boundary plane

Used for [Fake Fog](#) to hide the sky

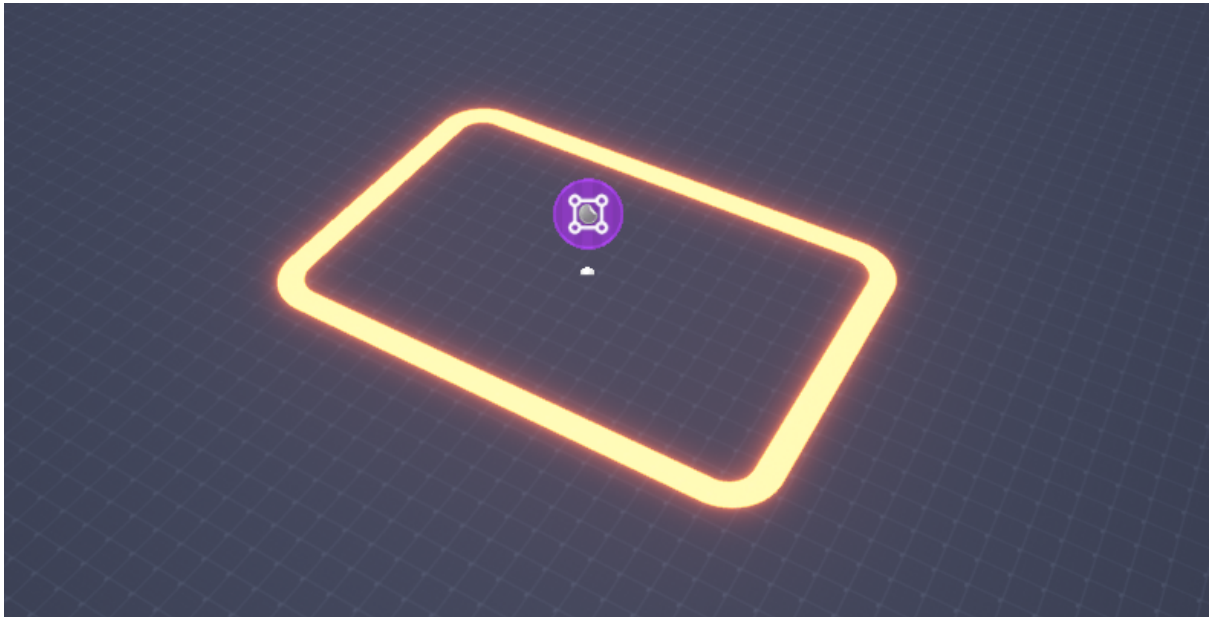
Enable Bottom Plane

Enables the bottom boundary plane

Translucent Sort Priority

Sort order of translucent materials. Change this value if you want other meshes with translucent materials to be rendered behind or on top of the border. You can set negative values

Decal Border



Name: BP_Decal_Border

Location: MapBorderCollection/Blueprints

Features:

- Rectangular or round borders
- Projected from above on all surfaces
- Main parameters can be changed at runtime
- Has a verification function to check if a point with (X,Y) coordinates falls inside an area. Corner rounding is taken into account during verification.
- By scaling it you can quickly change the size and height of the borders

Note: Objects must have the "Receives Decals" setting enabled (normally this setting is enabled by default) so that the decals can be rendered on top of them

Settings

All settings can be found in the "Details" panel -> "Settings" tab when selecting a border

Border Size

Size of the area

If the **Round Area** mode is enabled, X value is used for its size

Border Color

Color of the border

Round Area

Makes the area round

Rounded Corners

Enables corner rounding

Corner Roundness

The strength of corner rounding

Border Height

Height of the border

Decals will only be projected at this height

Line Thickness

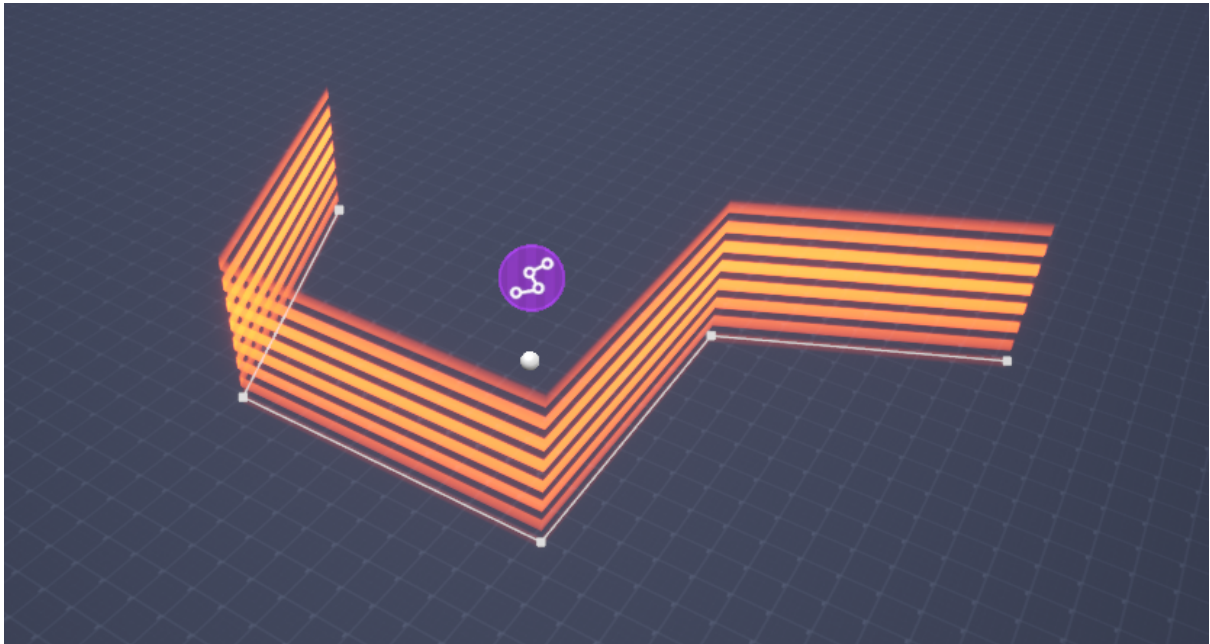
How thick the border line is

The higher the value, the thinner the border will be

Border Sharpness

How sharp the border is. At very large area sizes, borders may become blurry. If you wish to remove blurriness, increase this value

Spline Border



Name: BP_Spline_Border

Location: MapBorderCollection/Blueprints

Features:

- Vertical border that follows a spline
- Can be closed into a continuous loop
- Convenient manipulation using the standard Unreal spline tool
- Has a verification function to check if a point with (X,Y) coordinates falls inside an area. Corner rounding is taken into account during verification.
- By scaling it you can quickly change the height of the borders
- Can be used with [Fake Fog material](#)
- Spline points move only on a horizontal plane

Tip: To quickly create spline points: select a spline point, then hold 'Alt' and drag the mouse around

Tip: Press "G" to clear the spline helpers from the screen

Settings

All settings can be found in the "Details" panel -> "Settings" tab when selecting a border

Closed Border

Closes the border into a continuous loop

Border Material

Material that will be applied to the border

Border Height

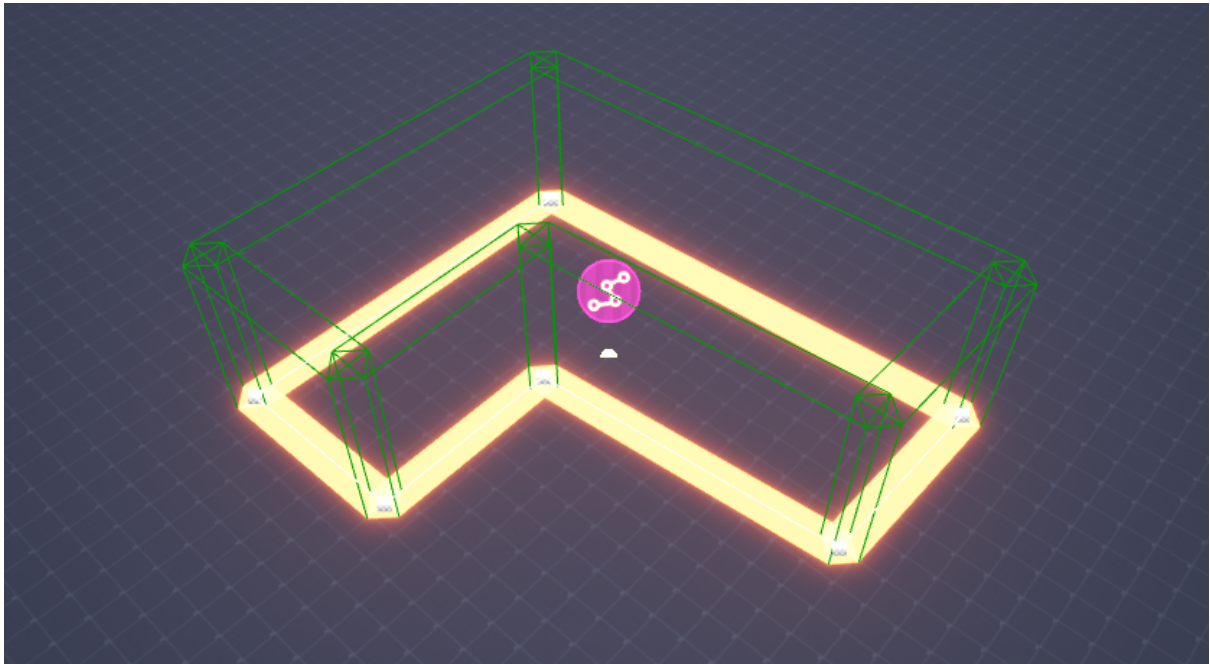
Height of the border

Decals will only be projected at this height

Translucent Sort Priority

Sort order of translucent materials. Change this value if you want other meshes with translucent materials to be rendered behind or on top of the border. You can set negative values

Spline Decal Border



Name: BP_Spline_Decal_Border

Location: MapBorderCollection/Blueprints

Features:

- Projected from above on all surfaces
- Decal border that follows a spline
- Can be closed into a continuous loop
- Convenient manipulation using the standard Unreal spline tool
- Has a verification function to check if a point with (X,Y) coordinates falls inside an area. Corner rounding is taken into account during verification
- By scaling it you can quickly change the height of the borders
- Spline points move only on a horizontal plane

Note: Objects must have the "Receives Decals" setting enabled (normally this setting is enabled by default) so that the decals can be rendered on top of them

Tip: To quickly create spline points: select a spline point, then hold 'Alt' and drag the mouse around

Tip: Press "G" to clear the spline helpers from the screen

Settings

All settings can be found in the "Details" panel -> "Settings" tab when selecting a border

Closed Border

Closes the border into a continuous loop

Border Half Thickness

Changes collision wall thickness

Border Height

The height of the border

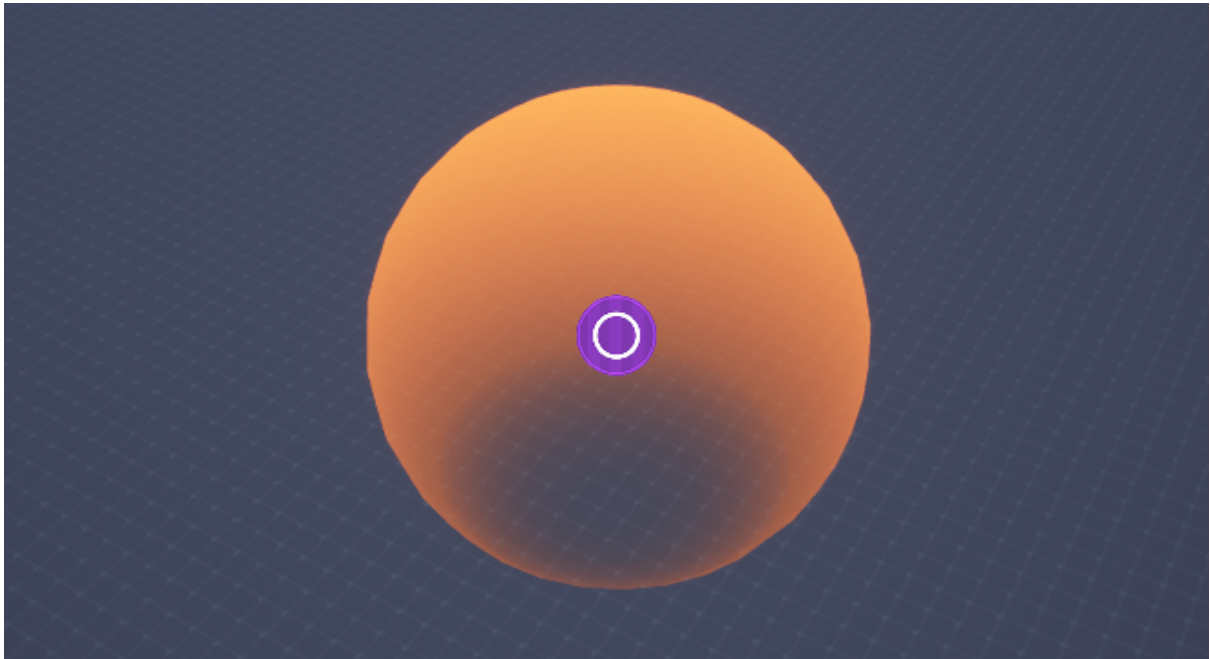
Border Color

Color of the border

Border Sharpness

How sharp the border is. At very large area sizes, borders may become blurry. If you wish to remove blurriness, increase this value

Sphere Border



Name: BP_Sphere_Border

Location: MapBorderCollection/Blueprints

Features:

- Sphere border
- Allows you to change the main parameters at runtime
- Has a verification function to check if a point with (X,Y,Z) coordinates falls inside an area
- By scaling it you can quickly change the sphere size
- Can be used with [Fake Fog material](#)

Settings

All settings can be found in the "Details" panel -> "Settings" tab when selecting a border

Sphere Size

Size of the sphere

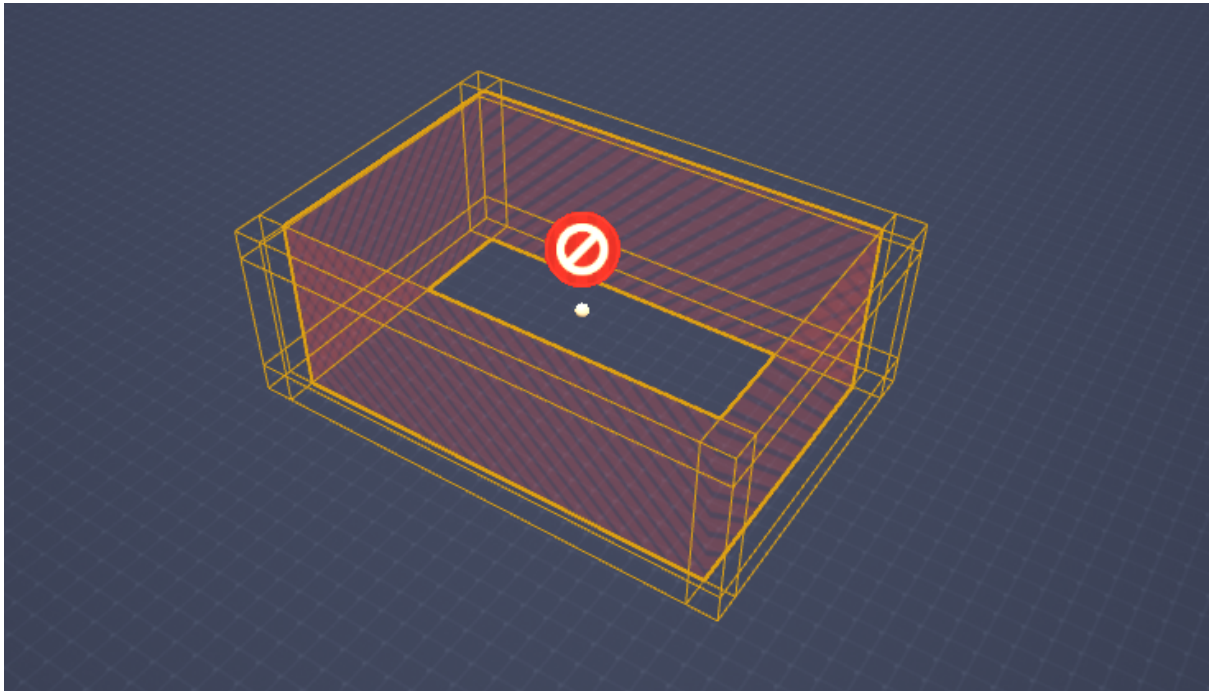
Border Material

Material that will be applied to the border

Translucent Sort Priority

Sort order of translucent materials. Change this value if you want other meshes with translucent materials to be rendered behind or on top of the border. You can set negative values

Blocking Border



Name: BP_Blocking_Border

Location: MapBorderCollection/Blueprints

Features:

- Rectangular or round vertical borders
- Has collision [Collision Settings](#)
- Has corner rounding
- Has a verification function to check if a point with (X,Y) coordinates falls inside an area. Corner rounding is taken into account during verification.
- By scaling it you can quickly change the size and height of the borders
- Can be used to block the camera so it won't move outside of map boundaries

Settings

All settings can be found in the "Details" panel -> "Settings" tab when selecting a border

Border Size

Size of the area

If the **Round Area** mode is enabled, X value is used for its size

Corner Roundness

The strength of corner rounding

Corner Segments

Number of collision segments that will be created at the corners of the border

Works if **Rounded Corners** is enabled

Border Half Thickness

Changes collision wall thickness

Border Height

The height of the border

Round Area

Makes the area round

Rounded Corners

Enables corner rounding

Enable Top Collision

Enables collision at the top

Enable Bottom Collision

Enables collision at the bottom

Show Debug Mesh

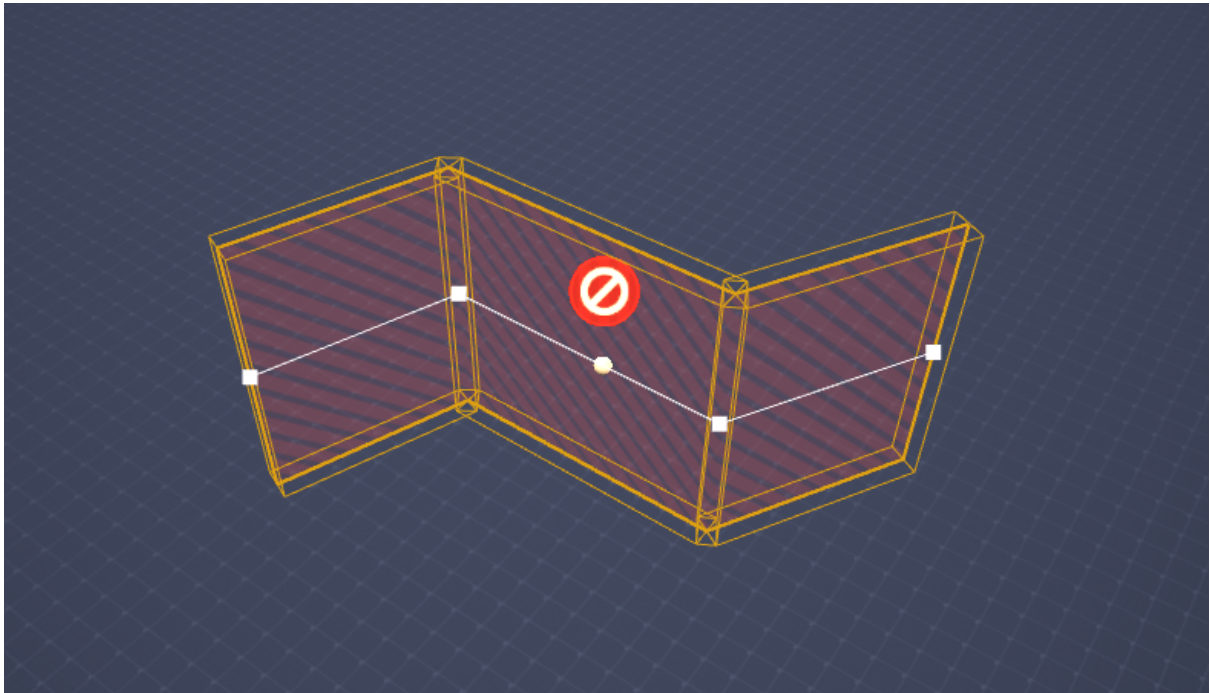
Enables the visual display of the border. Will only be shown in the editor.

Disable this after you finish editing the borders, so that extra meshes won't be created when the game runs

Show Debug Mesh At Runtime

Debug Mesh will be show in runtime

Spline Blocking Border



Name: BP_Spline_Blocking_Border

Location: MapBorderCollection/Blueprints

Features:

- Vertical border that follows a spline
- Can be closed into a continuous loop..
- Has collision [Collision Settings](#)
- Convenient manipulation using the standard Unreal spline tool
- By moving spline points vertically, individual sections of the border are moved
- Has a verification function to check if a point with (X,Y) coordinates falls inside an area. Corner rounding is taken into account during verification.
- By scaling it you can quickly change the height of the borders
- Can be used to the limit playable area of the map as an "invisible wall"

Tip: To quickly create spline points: select a spline point, then hold 'Alt' and drag the mouse around

Tip: Press "G" to clear the spline helpers from the screen

Settings

All settings can be found in the "Details" panel -> "Settings" tab when selecting a border

Closed Border

Closes the border into a continuous loop

Border Half Thickness

Changes collision wall thickness

Border Height

The height of the border

Enable Vertical Offset

Allows you to move sections of the border along the vertical axis following the spline points, if they were also shifted along the vertical axis

Show Debug Mesh

Enables the visual display of the border. Will only be shown in the editor.

Disable this after you finish editing, so that extra meshes won't be created when the game runs

Show Debug Mesh At Runtime

Debug Mesh will be show in runtime

Materials

Examine the premade material examples in the Overview scene. This could help you with the creation or customization of your own materials.

Fake Fog



Fake fog effect used for BP_Mesh_Border

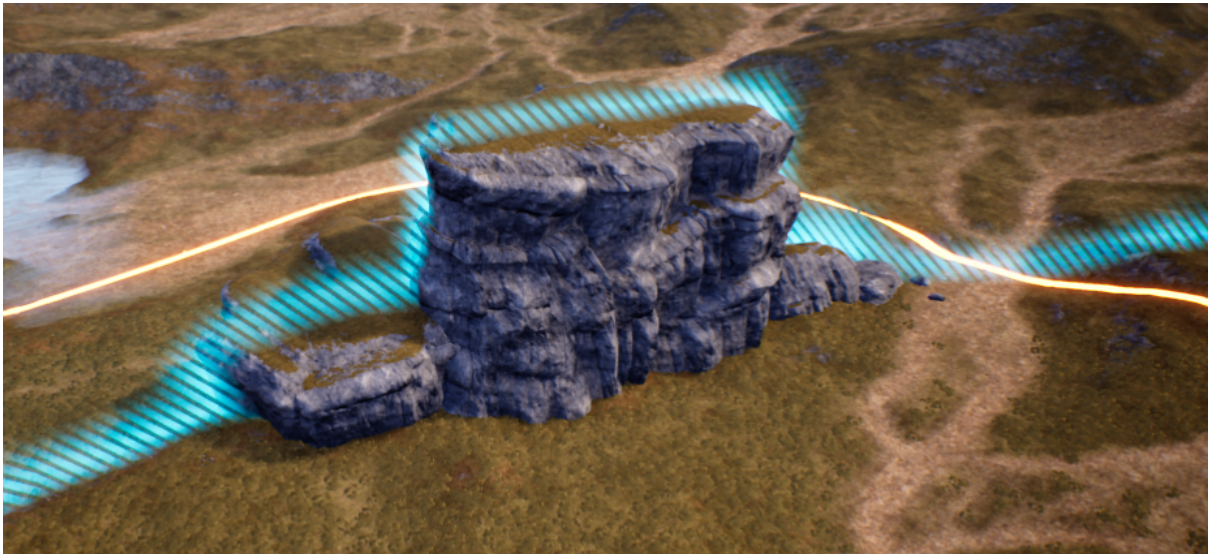
Can be used for shading or concealment of the world outside the game area

- Does not use Post Process Materials
Other objects with translucency are rendered correctly on top of the fake fog. In case of visual artifacts from the order of overlapping, adjust the sort order with **Translucent Sort Priority**
To prevent fog from overlapping translucent objects, set the value less than that of the object (-1 for example)
- If the camera leaves the bounds, it will be visible that the fog is not applied to the entire map. You can use a blocking border included in this asset to keep the camera from leaving the bounds of the map, so that it cannot go beyond the fog.



Note: Level present in this image is not included in this asset

Advanced Distance Fade Effect



Note: Materials and level present in this image are not included in the asset

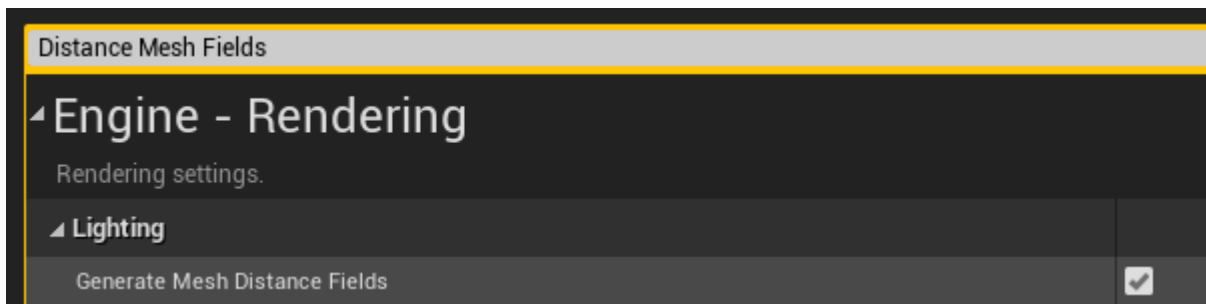
If your project doesn't have Distance Mesh Fields enabled, then you probably shouldn't enable it just for the sake of this boundary effect. When enabled, Distance Mesh Fields will be generated for all meshes in the scene

How to enable:

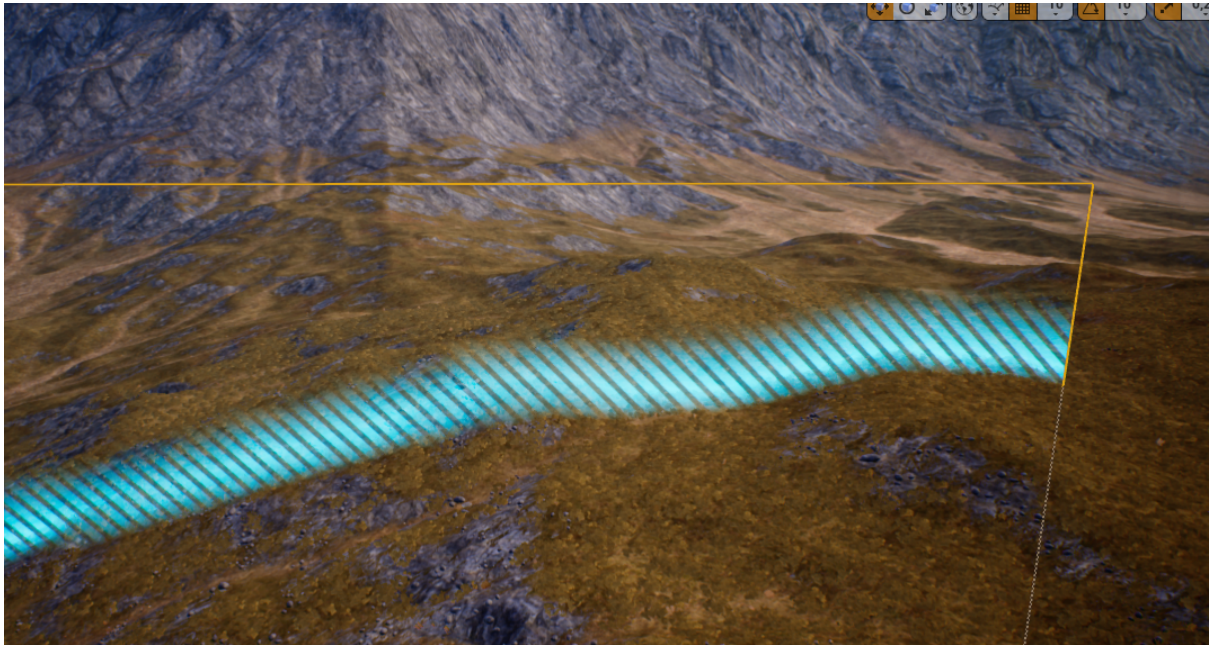
Open Edit > Project Settings...

Enter Distance Mesh Fields in the search bar and enable it

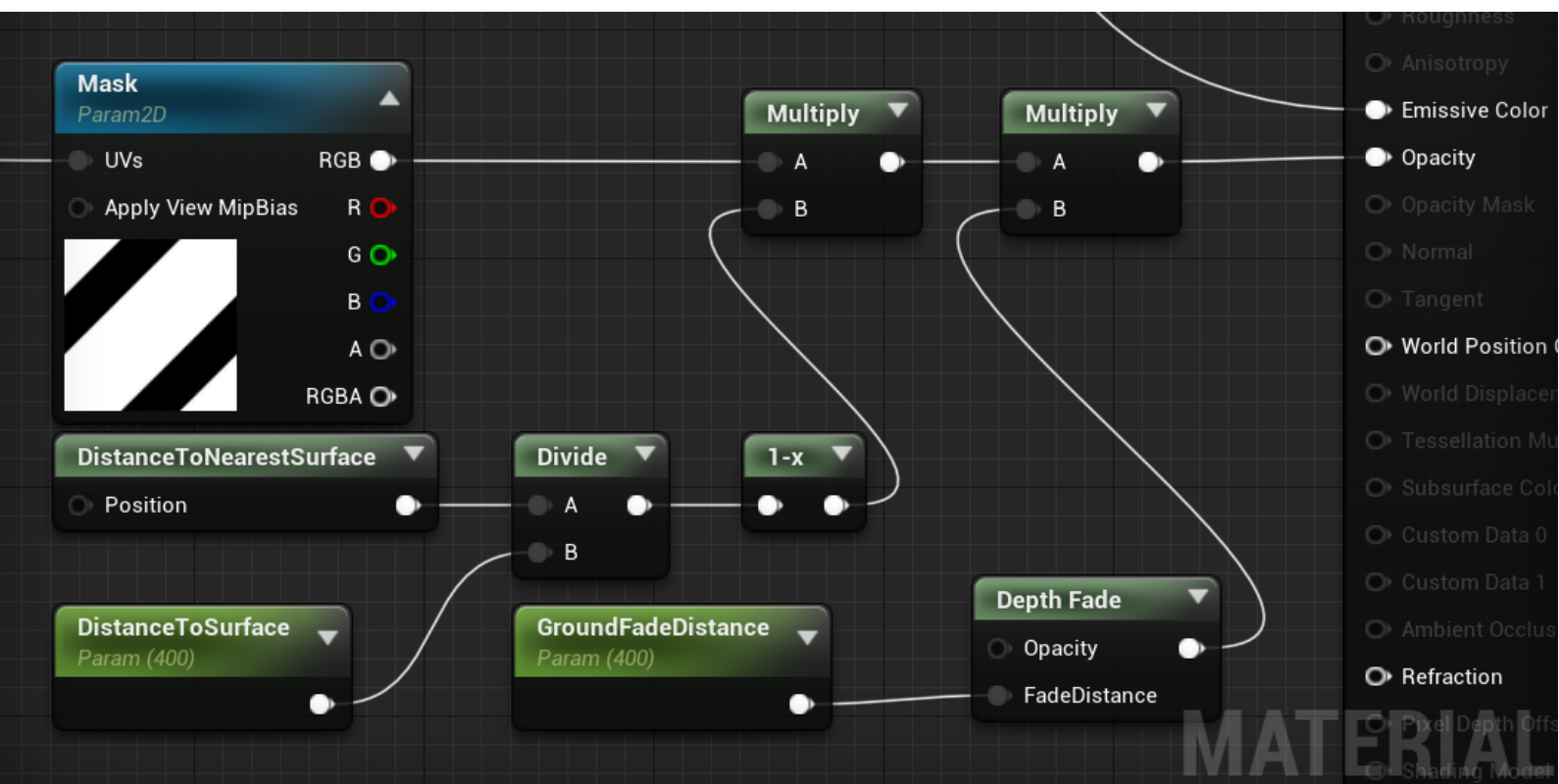
Restart the editor



This effect will follow the shape of the surface of the mesh to which it is applied



Quick material creation:



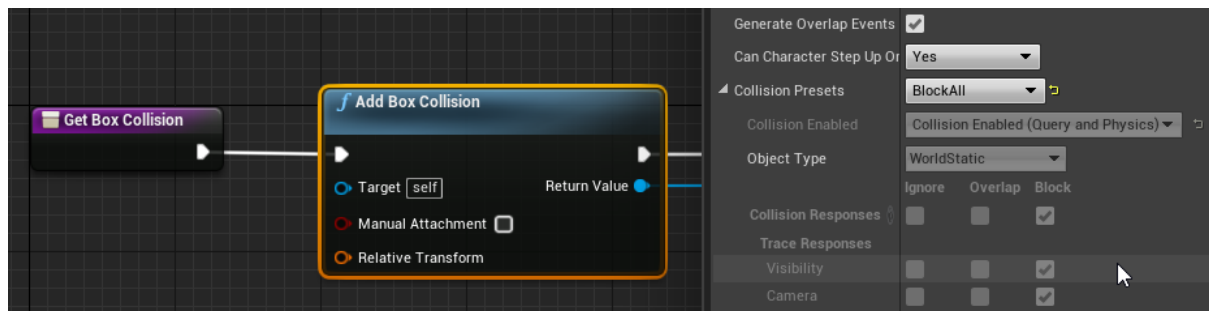
In this way, given effect can be combined with other materials included in the asset

Collision

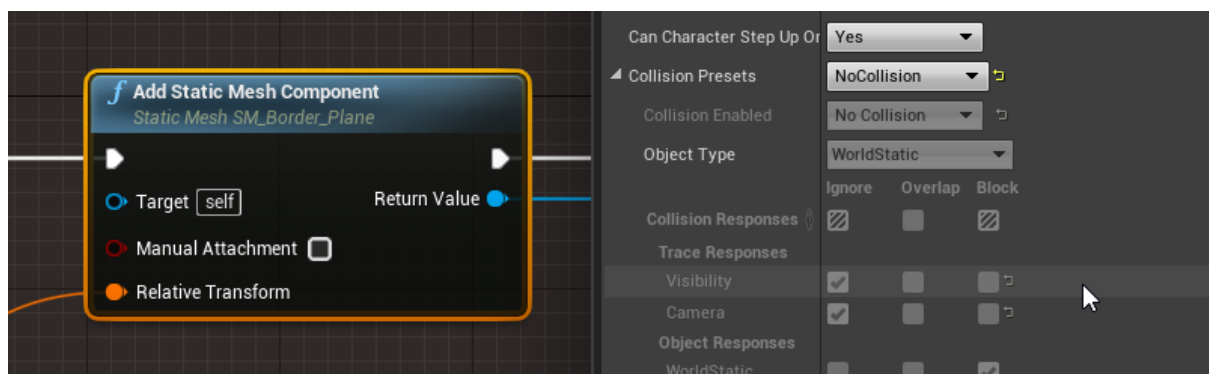
BP_Blocking_Border and BP_Spline_Blocking_Border have collision, which by default blocks everything.

Both of them have a "GetBoxCollision" function. You can set up collision inside this function.

To enable and/or configure it, open that function, select the 'Add Box Collision' node and in the 'Details' panel you will be able to enable and fine-tune collision.



For other borders, except for Decal-type borders, if necessary, you can also enable collision by finding the 'Add Static Mesh Component' node:



Or you can directly configure the collision of the components, depending on border type.

