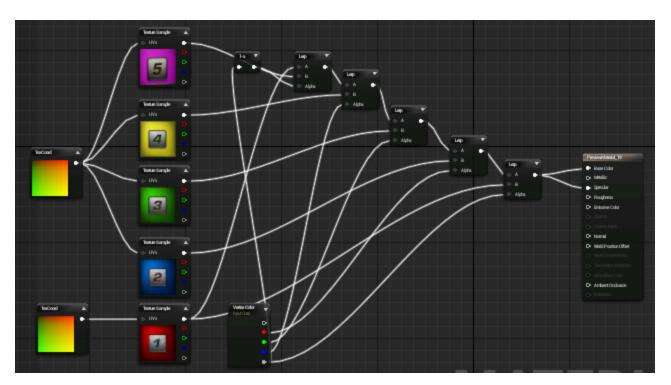
- Developer
- / Documentation
- / Unreal Engine ∨
- / Unreal Engine 5.4 Documentation
- / Building Virtual Worlds
- / Level Editor
- / Level Editor Modes
- / Mesh Paint Mode
- / Mesh Paint Material Setup
- / Create a Material for 5-Way Texture Blends

Create a Material for 5-Way Texture Blends

This page describes how to set up materials for 5-way (1-ARGB) texture blending.



To handle 5 textures in the blend weights setup, you need to create a Material similar to this:

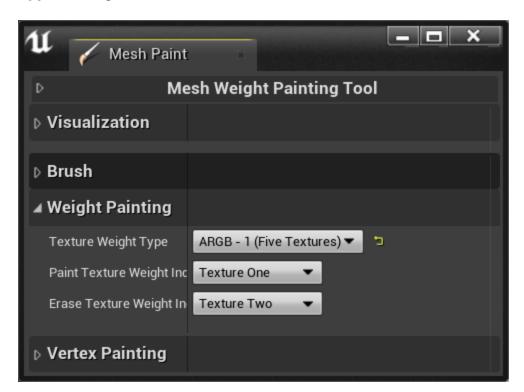


This works very similarly to the 3-way and 4-way Material setups. However, we now take one minus the Alpha value to get a fifth color. Here is what is happening:

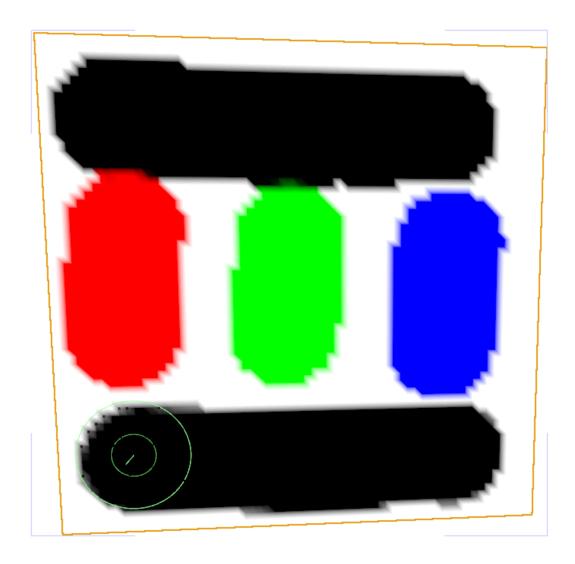
- Each of the color channels (ARGB) gets its own Linear Interpolation expression.
- An additional Lerp is added, driven by 1 minus the alpha of the Vertex Color node. This
 will be the fifth color.
- Each texture plugs into the B input of its corresponding Lerp node.

- The Lerp corresponding to Texture 1 plugs into the material, and its alpha will be driven by the Alpha channel from the vertex color.
- The Lerp corresponding to Texture 2 plugs into the A input of the Lerp corresponding to Texture 1, and its Alpha will be driven by the Red channel from the vertex color.
- The Lerp corresponding to Texture 3 plugs into the A input of the Lerp corresponding to Texture 2, and its Alpha will be driven by the Green channel from the vertex color.
- The Lerp corresponding to Texture 4 plugs into the A input of the Lerp corresponding to Texture 3, and its Alpha will be driven by the Blue channel from the vertex color.
- The Lerp corresponding to Texture 5 plugs into the A input of the Lerp corresponding to Texture 4, and its Alpha will be driven by the 1-alpha from the vertex color.
- Texture one also wraps around and becomes the A plug for the 5th and final Lerp. This
 makes Texture 1 the default texture.

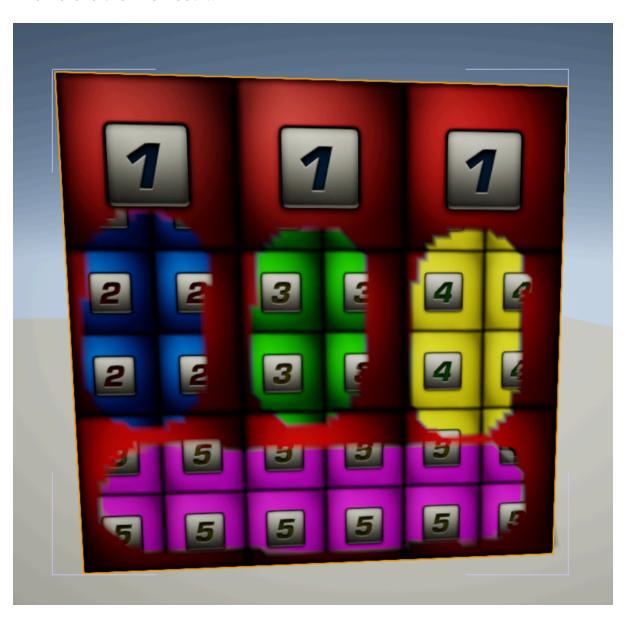
Once this is set up, the **Mesh Weight Painting Tool** should be active and the **Texture Weight Type** setting should be set to **ARGB - 1** (**Five Textures**).



Here is an example of this Material, first with the Mesh viewed in RGB Mode, showing the vertex colors in place. Note that with this setup, **Alpha** (shown black) corresponds to Texture 1, **red** corresponds to Texture 2, **green** corresponds to Texture 3, and **blue** corresponds to Texture 4. Incidentally, Alpha is also used for Texture 5 and is also shown in black at the bottom.



And here is the final result:



Notice that where the vertex color in the first image is black (Texture 1) there is no change. This is because Texture 1 is also plugged into the A input of the 4th Lerp expression (see above), making it the default texture. Essentially, you start with Texture 1 and can paint Textures 2, 3, and 4 down as you see fit, or paint Texture 1 back down over them at any time.

(i)

If you were going to be setting up such a Material over and over, this would be a great place to deploy a custom <u>Material Function</u>.