

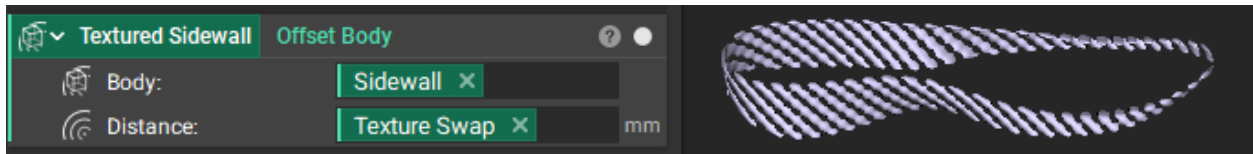
Follow Along: Procedural Texturing

In this lesson, we will show how to apply different textures to a design. If you are unfamiliar with the [Ramp block](#), please visit our Intro to [Field Driven Design Course](#) before reviewing this lesson. We will use different custom blocks for texturing our design, so to learn more, please visit our [Intro to Automation Course](#).

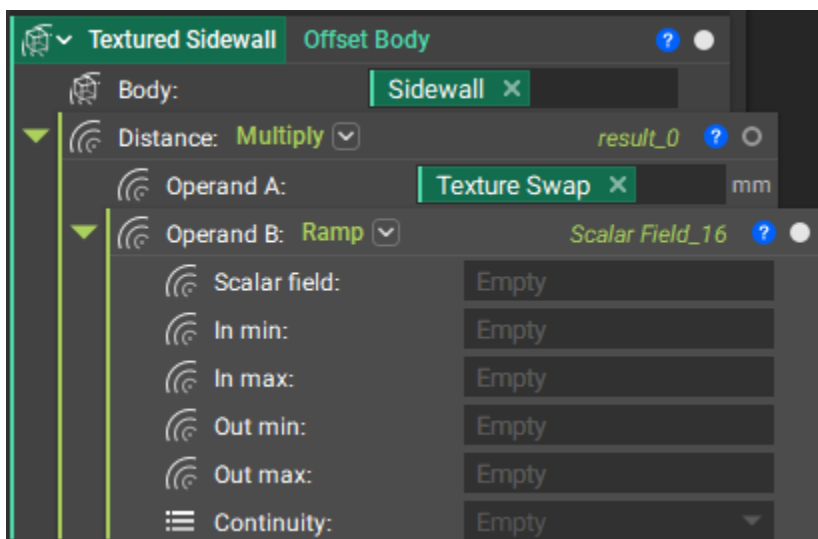
Please download the nTop file below to follow along with the tutorial.

The starter file contains the custom blocks we will use to create textures on a shoe midsole sidewall as well as the geometry.

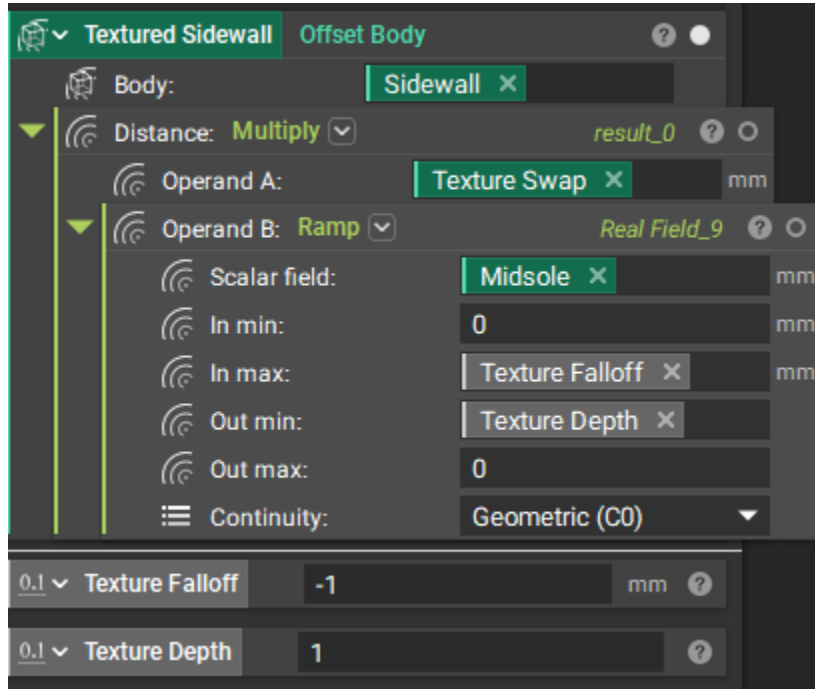
Step 1: Add an **Offset Body** block to your notebook and place in the “Sidewall” variable for the Body input. For the distance, use the “Texture Swap” variable. Because this is a custom block that already adds units to the scalar field, we do not need to multiply the “Texture Swap” by 1mm.



Step 2: Next, we are going to vary the distance, so when we are at the inner surface, the part is smooth and solid. First, remove the “Texture Swap” variable from the Distance input and replace it with a **Multiply** block. Add the “Texture Swap” variable as the first input, and the **Ramp** block as the second block.



Step 3: For the Scalar Field, use the “Midsole” variable. Define the In min as 0mm, and -1mm for the Out min. The Out Min is “Texture Falloff” which is -1 because we want to see the change in our texture inside our midsole, and the sidewall is 1mm in thickness. Define the In max as the “Texture Depth” variable and the Out maxas 0.



Step 4: Now that the workflow is complete, explore the different textures by swapping the input in the “Texture Swap” Variable.

