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Geometry Node

The *Geometry* node gives geometric information about the current shading point. All vector coordinates are in *World Space*. For volume shaders, only the position and incoming vector are available.

Inputs

This node has no inputs.

Properties

This node has no properties.

Outputs

Position

Position of the shading point.

Normal

Shading normal at the surface (includes smooth normals and bump mapping).

Tangent

Tangent at the surface.

True Normal

Geometry or flat normal of the surface.

Incoming

Vector pointing towards the point the shading point is being viewed from.

Parametric

Parametric coordinates of the shading point on the surface. To area lights it outputs its UV coordinates in planar mapping and in spherical coordinates to point lights.

Backfacing

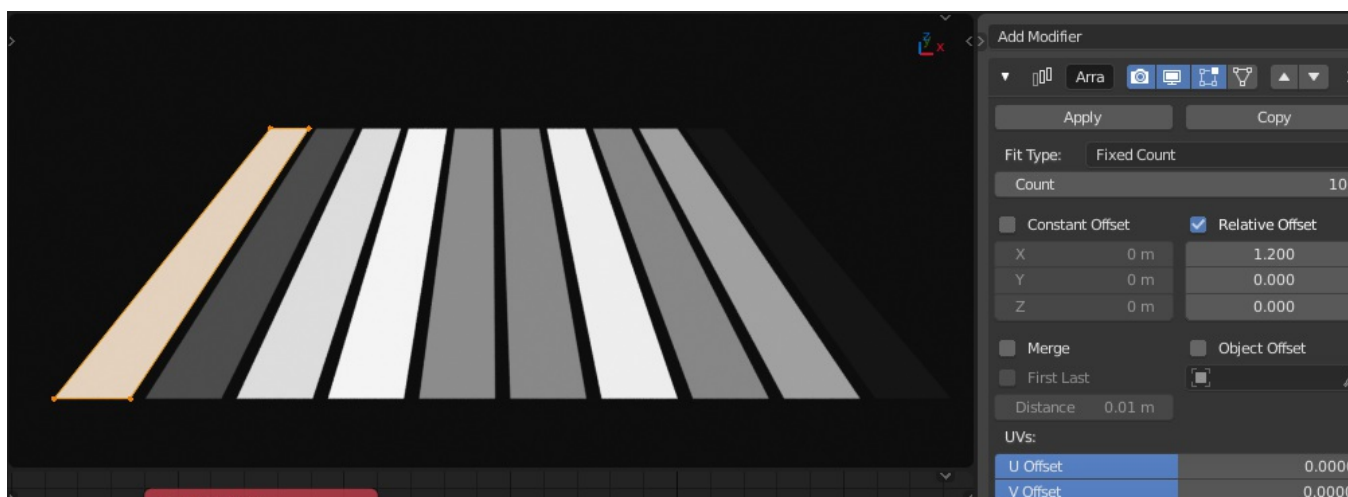
1.0 if the face is being viewed from the back side, 0.0 for the front side.

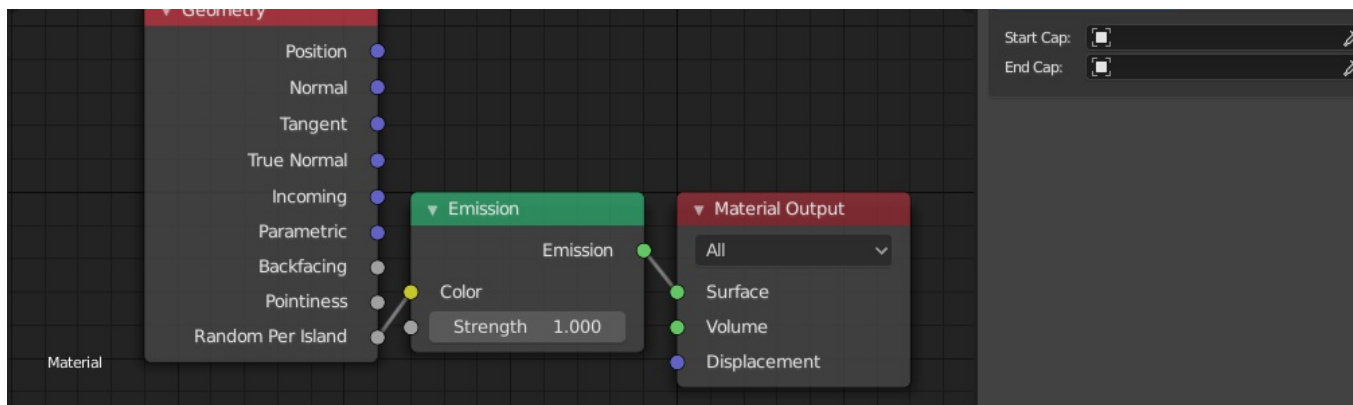
Pointiness Cycles Only

An approximation of the curvature of the mesh per vertex. Lighter values indicate convex angles, darker values indicate concave angles. It allows you to do effects like dirt maps and wear-off effects.

Random per Island Cycles Only

A random value for each connected component (island) of the mesh. It is useful to add variations to meshes composed of separated units like tree leaves, wood planks, or curves of multiple splines.





Get a random value for each instance of the mesh when using an Array modifier.

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