

Material Function Expressions

Material expressions that are used to create or execute Materials Functions.



FunctionInput

The **FunctionInput** expression can only be placed in a material function, where it defines one of the function's inputs.

Item	Description
Properties	
Input Name	The input's name, which will be displayed on MaterialFunctionCall expressions that use the material function containing the input.
Description	A description of the input, which will be displayed as a 'tooltip' when the connector for this input on a MaterialFunction Call expression is hovered over with the mouse.

Item	Description
Input Type	The type of data this input expects. Data passed to this input will be cast to this type, throwing a compiler error if the cast fails because the data is not compatible.
Preview Value	The value to use as a preview for this input when editing the material function containing it.
Use Preview Value As Default	If enabled, Preview Value will be used as the default value for this input if no data is passed in.
Sort Priority	Specifies the priority for this input to use when determining the order of the inputs to be displayed on a MaterialFunctionCall expression.

This node is used with [Material Functions](#).

FunctionOutput

The **FunctionOutput** expression can only be placed in a material function, where it defines one of the function's outputs.

Item	Description
Properties	
Output Name	The output's name, which will be displayed on MaterialFunctionCall expressions that use the material function containing the output.
Description	A description of the output, which will be displayed as a tooltip when the connector for this output on a MaterialFunction Call expression is hovered over with the mouse.
Sort Priority	Specifies the priority for this output to use when determining the order of the outputs to be displayed on a MaterialFunctionCall expression.

This node is used with [Material Functions](#).

MaterialFunctionCall

The **MaterialFunctionCall** expression allows you to use an external [Material Function](#) from another material or function. The external function's input and output nodes become inputs and outputs of the function call node. If a MaterialFunction is selected in the **Content Browser** when placing one of these expressions, it will automatically be assigned.

Shortcut: *F + Left Mouse Click*

Item	Description
Properties	
Material Function	Specifies the Material Function to be used.

This node is used with [Material Functions](#).

StaticBool

The **StaticBool** expression is used to provide a default bool value for a static bool function input within a function. This node does not switch between anything, so it must be used in conjunction with a StaticSwitch node.

Item	Description
Properties	
Value	The value of the bool, <i>True</i> (checked) or <i>False</i> .

This node is used with [Material Functions](#).

StaticSwitch

The **StaticSwitch** expression works like a StaticSwitchParameter, except that it only implements the switch and does not create a parameter.

Item	Description
Properties	
Default Value	The default bool value of the parameter that determines which input is active, <i>True</i> (checked) or <i>False</i> .
Inputs	
True	The input that is used when the Value of the switch is <i>True</i> .
False	The input that is used when the Value of the switch is <i>False</i> .
Value	Takes in a bool value that determines which input is active.

This node is used with [Material Functions](#).

TextureObject

The **TextureObject** expression is used to provide a default texture for a texture function input within a function. This node does not actually sample the texture, so it must be used in conjunction with a TextureSample node.

Item	Description
Properties	
Texture	The texture from the Content Browser that will be applied to this node.
Sampler Type	The type of data that will be output from the node.