GreasePencilBuildModifier(Modifier)

base classes — bpy_struct, Modifier

class bpy.types.**GreasePencilBuildModifier(Modifier)**

Animate strokes appearing and disappearing

concurrent_time_alignment

How should strokes start to appear/disappear

- START Align Start – All strokes start at same time (i.e. short strokes finish earlier).
- END Align End – All strokes end at same time (i.e. short strokes start later).

TYPE:

enum in ['START', 'END'], default 'START'

fade_factor

Defines how much of the stroke is fading in/out

TYPE:

float in [0, 1], default 0.0

fade_opacity_strength

How much strength fading applies on top of stroke opacity

TYPE:

float in [0, 1], default 0.0

fade_thickness_strength

How much strength fading applies on top of stroke thickness

TYPE:

float in [0, 1], default 0.0

frame_end

End Frame (when Restrict Frame Range is enabled)

TYPE:

float in [-1.04857e+06, 1.04857e+06], default 125.0

frame_start

Start Frame (when Restrict Frame Range is enabled)

TYPE:

float in [-1.04857e+06, 1.04857e+06], default 1.0

invert_layer_filter

Invert layer filter

TYPE:

boolean, default False

invert_layer_pass_filter

Invert layer pass filter

TYPE:

boolean, default False

invert_material_filter

Invert material filter

TYPE:

boolean, default False

invert_material_pass_filter

Invert material pass filter

TYPE:

boolean, default False

layer_filter

Layer name

TYPE:

string, default “”, (never None)

layer_pass_filter

Layer pass filter

TYPE:

int in [0, 100], default 0

length

Maximum number of frames that the build effect can run for (unless another GP keyframe occurs before this time has elapsed)

TYPE:

float in [1, 1.04857e+06], default 100.0

material_filter

Material used for filtering

TYPE:

`Material`

material_pass_filter

Material pass

TYPE:

int in [0, 100], default 0

mode

How strokes are being built

- `SEQUENTIAL` Sequential – Strokes appear/disappear one after the other, but only a single one changes at a time.
- `CONCURRENT` Concurrent – Multiple strokes appear/disappear at once.
- `ADDITIVE` Additive – Builds only new strokes (assuming ‘additive’ drawing).

TYPE:

enum in [‘SEQUENTIAL’, ‘CONCURRENT’, ‘ADDITIVE’], default ‘SEQUENTIAL’

object

Object used as build starting position

TYPE:

Object

open_fading_panel

TYPE:

boolean, default False

open_frame_range_panel

TYPE:

boolean, default False

open_influence_panel

TYPE:

boolean, default False

percentage_factor

Defines how much of the stroke is visible

TYPE:

float in [0, 1], default 0.0

speed_factor

Multiply recorded drawing speed by a factor

TYPE:

float in [0, 100], default 1.2

speed_maxgap

The maximum gap between strokes in seconds

TYPE:

float in [0, 100], default 0.5

start_delay

Number of frames after each GP keyframe before the modifier has any effect

TYPE:

float in [0, 1.04857e+06], default 0.0

target_vertex_group

Output Vertex group

TYPE:

string, default “”, (never None)

time_mode

Use drawing speed, a number of frames, or a manual factor to build strokes

- `DRAWSPEED` Natural Drawing Speed – Use recorded speed multiplied by a factor.
- `FRAMES` Number of Frames – Set a fixed number of frames for all build animations.
- `PERCENTAGE` Percentage Factor – Set a manual percentage to build.

TYPE:

enum in [‘DRAWSPEED’, ‘FRAMES’, ‘PERCENTAGE’], default ‘FRAMES’

transition

How are strokes animated (i.e. are they appearing or disappearing)

- `GROW` Grow – Show points in the order they occur in each stroke (e.g. for animating lines being drawn).
- `SHRINK` Shrink – Hide points from the end of each stroke to the start (e.g. for animating lines being erased).
- `FADE` Vanish – Hide points in the order they occur in each stroke (e.g. for animating ink fading or vanishing after getting drawn).

TYPE:
enum in ['GROW', 'SHRINK', 'FADE'], default 'GROW'

use_fading

Fade out strokes instead of directly cutting off

TYPE:
boolean, default False

use_layer_pass_filter

Use layer pass filter

TYPE:
boolean, default False

use_material_pass_filter

Use material pass filter

TYPE:
boolean, default False

use_percentage

Use a percentage factor to determine the visible points

TYPE:
boolean, default False

use_restrict_frame_range

Only modify strokes during the specified frame range

TYPE:
boolean, default False

classmethod bl_rna_get_subclass(id, default=None)

PARAMETERS:
id (*str*) – The RNA type identifier.

RETURNS:
The RNA type or default when not found.

RETURN TYPE:
`bpy.types.Struct` subclass

classmethod bl_rna_get_subclass_py(id, default=None)

PARAMETERS:
id (*str*) – The RNA type identifier.

RETURNS:
The class or default when not found.

RETURN TYPE:
type

Inherited Properties

- bpy_struct.id_data
- Modifier.name
- Modifier.type
- Modifier.show_viewport
- Modifier.show_render
- Modifier.show_in_editmode
- Modifier.show_on_cage
- Modifier.show_expanded
- Modifier.is_active
- Modifier.use_pin_to_last
- Modifier.is_override_data
- Modifier.use_apply_on_spline
- Modifier.execution_time
- Modifier.persistent_uid

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Modifier.bl_rna_get_subclass
- Modifier.bl_rna_get_subclass_py