BrushGpencilSettings(bpy_struct)

base class — bpy_struct

class bpy.types.**BrushGpencilSettings(bpy_struct)**

Settings for Grease Pencil brush

active_smooth_factor

Amount of smoothing while drawing

TYPE:

float in [0, 1], default 0.0

angle

Direction of the stroke at which brush gives maximal thickness (0° for horizontal)

TYPE:

float in [-1.5708, 1.5708], default 0.0

angle_factor

Reduce brush thickness by this factor when stroke is perpendicular to 'Angle' direction

TYPE:

float in [0, 1], default 0.0

aspect

TYPE:

mathutils.Vector of 2 items in [0.01, 1], default (1.0, 1.0)

brush_draw_mode

Preselected mode when using this brush

- ACTIVE Active – Use current mode.
- MATERIAL Material – Use always material mode.
- VERTEXCOLOR Vertex Color – Use always Vertex Color mode.

TYPE:

enum in ['ACTIVE', 'MATERIAL', 'VERTEXCOLOR'], default 'ACTIVE'

caps_type

The shape of the start and end of the stroke

TYPE:

enum in ['ROUND', 'FLAT'], default 'ROUND'

curve_jitter

Curve used for the jitter effect

TYPE:

CurveMapping, (readonly)

curve_random_hue

Curve used for modulating effect

TYPE:

CurveMapping, (readonly)

curve_random_pressure

Curve used for modulating effect

TYPE:

CurveMapping, (readonly)

curve_random_saturation

Curve used for modulating effect

TYPE:

CurveMapping, (readonly)

curve_random_strength

Curve used for modulating effect

TYPE:

CurveMapping, (readonly)

curve_random_uv

Curve used for modulating effect

TYPE:

CurveMapping, (readonly)

curve_random_value

Curve used for modulating effect

TYPE:

CurveMapping, (readonly)

curve_sensitivity

Curve used for the sensitivity

TYPE:

CurveMapping, (readonly)

curve_strength

Curve used for the strength

TYPE:

CurveMapping, (readonly)

dilate

Number of pixels to expand or contract fill area

TYPE:

int in [-40, 40], default 1

eraser_mode

Eraser Mode

- SOFT Dissolve – Erase strokes, fading their points strength and thickness.
- HARD Point – Erase stroke points.
- STROKE Stroke – Erase entire strokes.

TYPE:

enum in ['SOFT', 'HARD', 'STROKE'], default 'SOFT'

eraser_strength_factor

Amount of erasing for strength

TYPE:

float in [0, 100], default 0.0

eraser_thickness_factor

Amount of erasing for thickness

TYPE:

float in [0, 100], default 0.0

extend_stroke_factor

Strokes end extension for closing gaps, use zero to disable

TYPE:

float in [0, 10], default 0.0

fill_direction

Direction of the fill

- `NORMAL` Normal – Fill internal area.
- `INVERT` Inverted – Fill inverted area.

TYPE:

enum in ['NORMAL', 'INVERT'], default 'NORMAL'

fill_draw_mode

Mode to draw boundary limits

- `BOTH` All – Use both visible strokes and edit lines as fill boundary limits.
- `STROKE` Strokes – Use visible strokes as fill boundary limits.
- `CONTROL` Edit Lines – Use edit lines as fill boundary limits.

TYPE:

enum in ['BOTH', 'STROKE', 'CONTROL'], default 'BOTH'

fill_extend_mode

Types of stroke extensions used for closing gaps

- `EXTEND` Extend – Extend strokes in straight lines.
- `RADIUS` Radius – Connect endpoints that are close together.

TYPE:

enum in ['EXTEND', 'RADIUS'], default 'EXTEND'

fill_factor

Factor for fill boundary accuracy, higher values are more accurate but slower

TYPE:

float in [0.05, 8], default 0.0

fill_layer_mode

Layers used as boundaries

- `VISIBLE` Visible – Visible layers.
- `ACTIVE` Active – Only active layer.

- `ABOVE` Layer Above – Layer above active.
- `BELOW` Layer Below – Layer below active.
- `ALL_ABOVE` All Above – All layers above active.
- `ALL_BELOW` All Below – All layers below active.

TYPE:

enum in ['VISIBLE', 'ACTIVE', 'ABOVE', 'BELOW', 'ALL_ABOVE', 'ALL_BELOW'], default 'VISIBLE'

fill_simplify_level

Number of simplify steps (large values reduce fill accuracy)

TYPE:

int in [0, 10], default 0

fill_threshold

Threshold to consider color transparent for filling

TYPE:

float in [0, 1], default 0.0

hardness

Gradient from the center of Dot and Box strokes (set to 1 for a solid stroke)

TYPE:

float in [0.001, 1], default 1.0

input_samples

Generated intermediate points for very fast mouse movements (Set to 0 to disable)

TYPE:

int in [0, 10], default 0

material

Material used for strokes drawn using this brush

TYPE:

`Material`

material_alt

Material used for secondary uses for this brush

TYPE:

`Material`

outline_thickness_factor

Thickness of the outline stroke relative to current brush thickness

TYPE:

float in [0, 1], default 0.0

pen_jitter

Jitter factor of brush radius for new strokes

TYPE:

float in [0, 100], default 0.0

pen_smooth_factor

Amount of smoothing to apply after finish newly created strokes, to reduce jitter/noise

TYPE:

float in [0, 2], default 0.0

pen_smooth_steps

Number of times to smooth newly created strokes

TYPE:

int in [0, 100], default 0

pen_strength

Color strength for new strokes (affect alpha factor of color)

TYPE:

float in [0, 1], default 0.0

pen_subdivision_steps

Number of times to subdivide newly created strokes, for less jagged strokes

TYPE:

int in [0, 3], default 0

pin_draw_mode

Pin the mode to the brush

TYPE:

boolean, default False

random_hue_factor

Random factor to modify original hue

TYPE:

float in [0, 1], default 0.0

random_pressure

Randomness factor for pressure in new strokes

TYPE:

float in [0, 1], default 0.0

random_saturation_factor

Random factor to modify original saturation

TYPE:

float in [0, 1], default 0.0

random_strength

Randomness factor strength in new strokes

TYPE:

float in [0, 1], default 0.0

random_value_factor

Random factor to modify original value

TYPE:

float in [0, 1], default 0.0

show_fill

Show transparent lines to use as boundary for filling

TYPE:

boolean, default True

show_fill_boundary

Show help lines for filling to see boundaries

TYPE:

boolean, default True

show_fill_extend

Show help lines for stroke extension

TYPE:

boolean, default True

show_lasso

Do not display fill color while drawing the stroke

TYPE:

boolean, default False

simplify_factor

Factor of Simplify using adaptive algorithm

TYPE:

float in [0, 100], default 0.0

simplify_pixel_threshold

Threshold in screen space used for the simplify algorithm. Points within this threshold are treated as if they were in a straight line.

TYPE:

float in [0, 10], default 0.0

use_active_layer_only

Only edit the active layer of the object

TYPE:

boolean, default False

use_collide_strokes

Check if extend lines collide with strokes

TYPE:

boolean, default False

use_edit_position

The brush affects the position of the point

TYPE:

boolean, default False

use_edit_strength

The brush affects the color strength of the point

TYPE:

TYPE:

boolean, default False

use_edit_thickness

The brush affects the thickness of the point

TYPE:

boolean, default False

use_edit_uv

The brush affects the UV rotation of the point

TYPE:

boolean, default False

use_fill_limit

Fill only visible areas in viewport

TYPE:

boolean, default True

use_jitter_pressure

Use tablet pressure for jitter

TYPE:

boolean, default False

use_keep_caps_eraser

Keep the caps as they are and don’t flatten them when erasing

TYPE:

boolean, default False

use_material_pin

Keep material assigned to brush

TYPE:

boolean, default False

use_occlude_eraser

Erase only strokes visible and not occluded

TYPE:

boolean, default False

use_pressure

Use tablet pressure

TYPE:

boolean, default False

use_random_press_hue

Use pressure to modulate randomness

TYPE:

boolean, default False

use_random_press_radius

Use pressure to modulate randomness

TYPE:
boolean, default False

use_random_press_sat

Use pressure to modulate randomness

TYPE:
boolean, default False

use_random_press_strength

Use pressure to modulate randomness

TYPE:
boolean, default False

use_random_press_uv

Use pressure to modulate randomness

TYPE:
boolean, default False

use_random_press_val

Use pressure to modulate randomness

TYPE:
boolean, default False

use_settings_outline

Convert stroke to outline

TYPE:
boolean, default False

use_settings_postprocess

Additional post processing options for new strokes

TYPE:
boolean, default False

use_settings_random

Random brush settings

TYPE:
boolean, default False

use_settings_stabilizer

Draw lines with a delay to allow smooth strokes (press Shift key to override while drawing)

TYPE:
boolean, default True

use_strength_pressure

Use tablet pressure for color strength

TYPE:
boolean, default False

use_stroke_random_hue

Use randomness at stroke level

TYPE:

boolean, default False

use_stroke_random_radius

Use randomness at stroke level

TYPE:

boolean, default False

use_stroke_random_sat

Use randomness at stroke level

TYPE:

boolean, default False

use_stroke_random_strength

Use randomness at stroke level

TYPE:

boolean, default False

use_stroke_random_uv

Use randomness at stroke level

TYPE:

boolean, default False

use_stroke_random_val

Use randomness at stroke level

TYPE:

boolean, default False

use_trim

Trim intersecting stroke ends

TYPE:

boolean, default False

uv_random

Random factor for auto-generated UV rotation

TYPE:

float in [0, 1], default 0.0

vertex_color_factor

Factor used to mix vertex color to get final color

TYPE:

float in [0, 1], default 0.0

vertex_mode

Defines how vertex color affect to the strokes

- STROKE Stroke – Vertex Color affects to Stroke only.

- `FILL` Fill – Vertex Color affects to Fill only.
- `BOTH` Stroke & Fill – Vertex Color affects to Stroke and Fill.

TYPE:
enum in ['STROKE', 'FILL', 'BOTH'], default 'STROKE'

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`

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`

References

- `Brush.gpencil_settings`