ShrinkwrapConstraint(Constraint)

base classes — bpy_struct, Constraint

class bpy.types.**ShrinkwrapConstraint(Constraint)**

Create constraint-based shrinkwrap relationship

cull_face

Stop vertices from projecting to a face on the target when facing towards/away

- OFF Off – No culling.
- FRONT Front – No projection when in front of the face.
- BACK Back – No projection when behind the face.

TYPE:

enum in ['OFF', 'FRONT', 'BACK'], default 'OFF'

distance

Distance to Target

TYPE:

float in [0, inf], default 0.0

project_axis

Axis constrain to

TYPE:

enum in Object Axis Items, default 'POS_X'

project_axis_space

Space for the projection axis

- WORLD World Space – The constraint is applied relative to the world coordinate system.
- CUSTOM Custom Space – The constraint is applied in local space of a custom object/bone/vertex group.
- POSE Pose Space – The constraint is applied in Pose Space, the object transformation is ignored.
- LOCAL_WITH_PARENT Local With Parent – The constraint is applied relative to the rest pose local coordinate system of the bone, tl including the parent-induced transformation.
- LOCAL Local Space – The constraint is applied relative to the local coordinate system of the object.

TYPE:

enum in ['WORLD', 'CUSTOM', 'POSE', 'LOCAL_WITH_PARENT', 'LOCAL'], default 'WORLD'

project_limit

Limit the distance used for projection (zero disables)

TYPE:

float in [0, inf], default 0.0

shrinkwrap_type

Select type of shrinkwrap algorithm for target position

- NEAREST_SURFACE Nearest Surface Point – Shrink the location to the nearest target surface.
- PROJECT Project – Shrink the location to the nearest target surface along a given axis.
- NEAREST_VERTEX Nearest Vertex – Shrink the location to the nearest target vertex.
- TARGET_PROJECT Target Normal Project – Shrink the location to the nearest target surface along the interpolated vertex normals of

the target.

TYPE:

enum in ['NEAREST_SURFACE', 'PROJECT', 'NEAREST_VERTEX', 'TARGET_PROJECT'], default 'NEAREST_SURFACE'

target

Target Mesh object

TYPE:

`Object`

track_axis

Axis that is aligned to the normal

TYPE:

enum in ['TRACK_X', 'TRACK_Y', 'TRACK_Z', 'TRACK_NEGATIVE_X', 'TRACK_NEGATIVE_Y', 'TRACK_NEGATIVE_Z'], default 'TRACK_X'

use_invert_cull

When projecting in the opposite direction invert the face cull mode

TYPE:

boolean, default False

use_project_opposite

Project in both specified and opposite directions

TYPE:

boolean, default False

use_track_normal

Align the specified axis to the surface normal

TYPE:

boolean, default False

wrap_mode

Select how to constrain the object to the target surface

TYPE:

enum in Modifier Shrinkwrap Mode Items, default 'ON_SURFACE'

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
- Constraint.name
- Constraint.type
- Constraint.is_override_data
- Constraint.owner_space
- Constraint.target_space
- Constraint.space_object
- Constraint.space_subtarget
- Constraint.mute
- Constraint.enabled
- Constraint.show_expanded
- Constraint.is_valid
- Constraint.active
- Constraint.influence
- Constraint.error_location
- Constraint.error_rotation

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
- Constraint.bl_rna_get_subclass
- Constraint.bl_rna_get_subclass_py